Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

May 22, 1961

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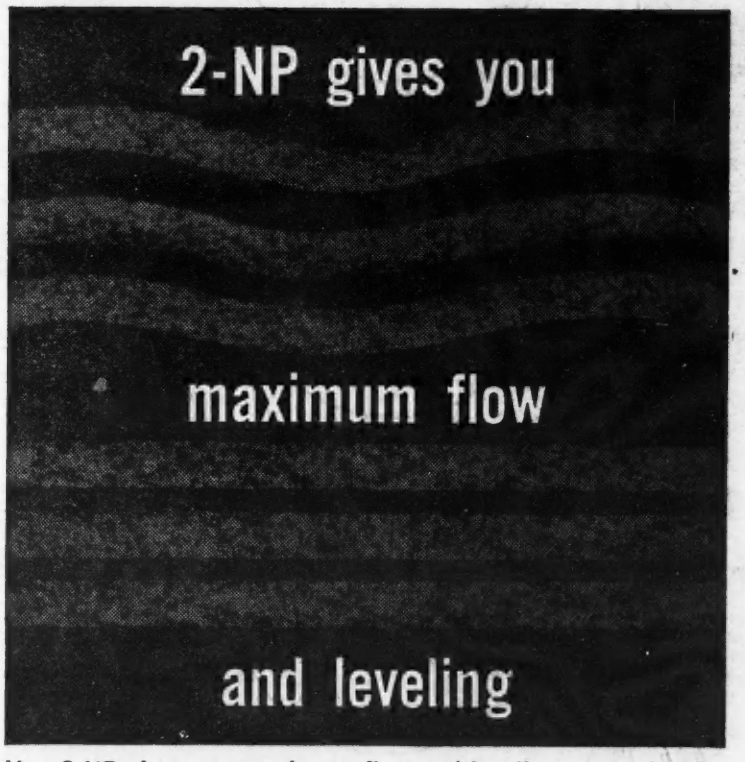

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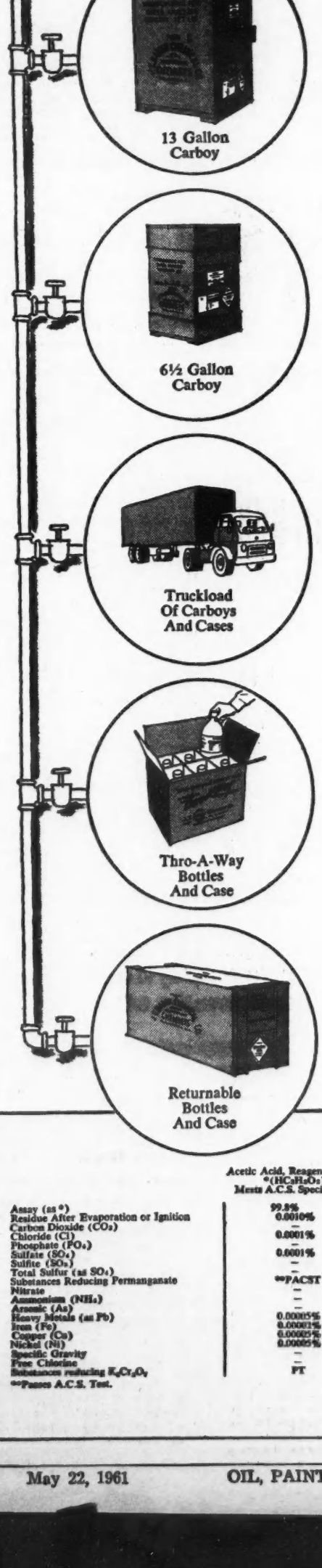

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Assay (as *)	99.8%	36.5-38.0%	69.0-71.0%	95.0-98.0%	28.0-30.0%
Residue After Evaporation or Ignition	0.0010%	0.0004%	0.0004%	0.0004%	0.001%
Carbon Dioxide (CO_2)	–	–	–	–	0.002%
Chloride (Cl)	0.0001%	–	0.00005%	0.00001%	0.00005%
Phosphate (PO_4)	–	–	–	–	0.0001%
Sulfate (SO_4)	0.0001%	0.0001%	0.0001%	–	–
Sulfite (SO_3)	–	0.0001%	–	–	–
Total Sulfur (as SO_4)	–	–	–	–	0.0001%
Substances Reducing Permanganate	**PACST	–	–	0.0001%	**PACST
Nitrate	–	–	–	<0.000005%	–
Ammonium (NH_4)	–	0.0003%	–	0.0001%	–
Arsenic (As)	–	0.000001%	0.000001%	0.000001%	–
Heavy Metals (as Pb)	0.00005%	0.0001%	0.00002%	0.0001%	0.00005%
Iron (Fe)	0.00002%	0.00001%	0.00002%	0.00002%	0.00001%
Copper (Cu)	0.00005%	0.00005%	0.00005%	0.00005%	–
Nickel (Ni)	0.00005%	0.00005%	0.00005%	0.00005%	–
Specific Gravity	–	1.185-1.192	1.416-1.424	1.84	0.902-0.896
Free Chlorine	–	0.0001%	–	–	–
Substances reducing $K_2Cr_2O_7$	PT		–	–	–

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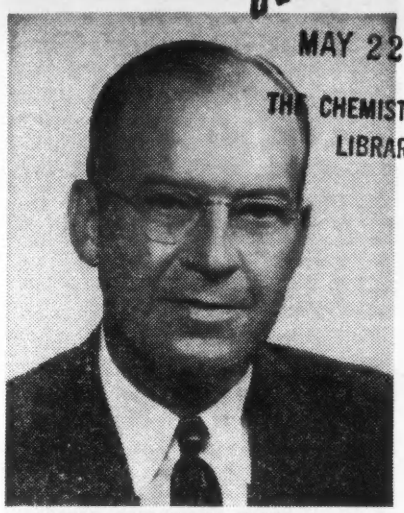
Vol. 179 No. 21 30 Church St., New York 7, N.Y. May 22, 1961



COMBINED OPERATIONS CHIEF: Donald K. Ballman, named vice-president for marketing, purchasing and distrbiution by Dow Chemical Company, Midland, Mich.

Gulf Oil in Cumene In a Great Big Way

Gulf Oil Corporation is getting into the cumene business in a great big way. It is planning on putting up a multi-million-dollar benzene-cumene complex at its Philadelphia refinery.

The disclosure, made last week at the formal unveiling of its new 36-million-pound oxo alcohol installation in the Brotherly City, puts Gulf across the river from Texaco, Inc., with a cumene plant which it claims "will be among the world's largest."

How large is that? Gulf won't say right out. However, Texaco's cumene facility at its Eagle Point refinery (Westville, N. J.), until now credited with being the biggest in the world, is rated at 70 million pounds a year.

With this as a minimum, capacity of the Gulf plant could run as high as 120 million pounds of cumene annually. At least, that's the feeling in the trade.

Gulf's new cumene installation, which is scheduled for completion early next year, will use the entire production of its companion benzene unit and will take part of the Philadelphia refinery's propylene output. These charge stocks are now used mainly as motor fuel or LP-gases.

Biggest question raised by the new venture is this: Who will get Gulf's cumene output? Favorite choice in the trade is Rohm & Haas Company, probably the largest user of cumene in the Philadelphia area.

Cumene, which via the cumene-phenol

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Vinyl Project in Britain Is Postponed by Reichhold

Reichhold Chemicals, Ltd., British affiliate of Reichhold Chemicals, Inc., White Plains, N. Y., says it will defer for the time being plans to build a new vinyl plastic producing unit at Brockhampton.

Reichhold officials say that UK vinyl sales in the last quarter of 1960 tended downward, though there have been some signs of improvement in sales and profit margins in the last few months.

A Reichhold unit now produces vinyls in a facility just outside of London. The ultimate plan is to close down this installation and concentrate all of Reichhold's vinyl production in a larger plant at Brockhampton.

The company expects its plant at Speke, which is geared to turn out a line of alkyds and related resins, to get into production this month.

Polyolefin Marketers in Race: Must Get 800-900 Million Lbs. More Yearly Business by '64

Polyolefin marketers will have to increase their sales by 800 million to 900 million pounds in 1964—assuming over-capacity remains constant between now and then. This onerous burden was placed squarely on the shoulders of olefin salesmen last week by J. B. Knowles of Union Carbide Corporation. Speaking before the annual meeting of Chemical Market Research Association in New York, the sales manager for Union Carbide Plastics Company noted that by 1964, polyolefin capacity will be 2.6 billion pounds.

Adding bulk to the sales burden, Mr. Knowles points out that if foreign markets become self-sufficient by 1964, add another 300 million pounds, presently exported, that will have to be absorbed domestically. "We, in marketing of polyolefins, have quite a job ahead," he observes.

Elsewhere Optimism Prevails

Mr. Knowles' bearish forecast for polyolefins contrasts somewhat with predictions of CMRA speakers in other areas, where optimism prevailed, albeit with varying degrees of caution. Other findings:

- The chlor-alkali industry will grow at the rate of 4.5 percent a year between now and 1965 (see separate story on page 5). This includes caustic soda, chlorine, soda ash and hydrochloric acid.
- Total natural and synthetic rubber consumption on a world-wide basis will reach 5.4 million long tons in 1965, compared with 4.3 million long tons in 1960 (see separate story below).
- Reinforced plastics have been growing at the rate of 23 percent a year, with polyesters a "juicy" 33 percent per annum.
- Non-cellulosic fiber shipments in 1962 will reach 770 million pounds, compared with 609 million pounds in 1960.
- Fertilizer use has jumped from 12.7 million tons in 1950, on a global basis, to 23.1 million tons in 1960—up 82 percent.
- Paint sales, which totaled $526 million in the US in 1928, reached nearly $1.8 billion in 1959 and were probably about the same in 1960.
- Of total sales of top-volume pharmaceuticals of $1.8 billion in 1960, anti-

—Continued on page 60

Oral Polio Vaccine Race: English Firm First in UK

A British company, Wellcome Foundation, Ltd., London, England, has beaten its American rivals, to become the first firm to market Sabin oral polio vaccine in Britain.

The vaccine, produced by the Wellcome Foundation, was late last week given clearance for sale by the British Ministry of Health, according to the foundation's American subsidiary, Burroughs Wellcome & Co. (USA), Tuckahoe, N. Y.

It is not known whether Burroughs Wellcome will be licensed to sell the vaccine in the US. Supplies are being held in

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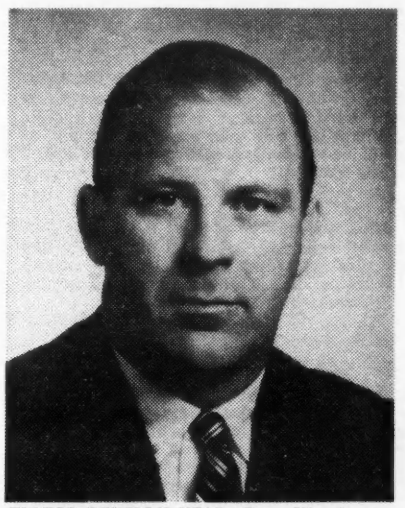

FLAVOR DIVISION HEAD: Peter Wood, newly-elected vice-president of Fritzsche Brothers, Inc., New York, who has been appointed director of its flavor division.

Methyl Chloride Team: Ansul, Continental Oil

Ansul Chemical Company and Continental Oil Company announced over the weekend that they are going into partnership on a 60-million-pounds-a-year methyl chloride plant at Lake Charles, La. Work on the unit is expected to start immediately, with completion scheduled for early next year.

The facility will be owned fifty-fifty by the two partners, and will cost more than $1 million to build.

Ansul, which already operates a methyl chloride facility in its headquarters city of Marinette, Wis., will be the exclusive distributor for the Lake Charles' plant's output.

Methyl chloride is coming in for a good

—Continued on page 60

USSR's Chemical Growth Reported World's Highest

The USSR is claiming world-leading chemical growth this year with overall chemcial ouput in the first quarter of 1961 up 11 percent over the like 1960 period.

Sample production figures include 1.4 million tons of sulfuric acid in the first quarter, up 104 percent on 1960's first three months; 3.7 million tons of fertilizers, up 110 percent; 61,600 tons of synthetic fibers, up 125 percent; tars and plastics, up 24 percent.

UK Drug Makers Snubbed as Gov't Buys on Continent

Taking its cue, perhaps, from the Military Medical Supply Agency and Veterans Administration in this country, the British Ministry of Health is going to buy drugs for its hospital service from unlicensed pharmaceutical producers on the European continent.

The UK ministry lit the fuse to this commercial time bomb late last week in London with the abrupt disclosure of its pharmaceutical shopping plans.

Its first move is to put out a call to continental drug makers for immediate bids on tetracycline, chloramphenicol and chlorothiazide. Whether other items will be added to the list in the future, the government agency won't say at this juncture.

Major UK Drug Producers

Major tetracycline producers in Britain are American Cyanamid Company ("Achromycin") and Chas. Pfizer & Co. ("Terramycin").

Parke, Davis & Co. holds the UK patent on chloramphenicol ("Chloromycetin"), and Merck Sharp & Dohme Division of Merck & Co. is similarly protected on chlorothiazide ("Diuril").

The British government buys some $39 million worth of drugs yearly for its hospital service. Its purchases of tetracycline, chloramphenicol and chlorothiazide total around $3 million, and, it says, it will save about $1 million on these three items alone by buying abroad.

To compensate the UK patent holders, the Ministry of Health will try to negotiate royalty agreements with the British producers.

Failing in this, the UK agency will leave it up to the courts to work out an equitable royalty payment scheme.

Just what this might be isn't quite clear. Early reports have it that the ministry is thinking along the lines of a 5 percent royalty payment, but there are no clarifying details.

The action, taken under section 46 of the British patents act, is limited to drugs purchased for the hospital service. Whether the plan will be extended to the prescription service (yearly drug bill: $310 million) remains to be seen.

Officials of the four affected drug companies here, obviously stunned by the ac-

—Continued on page 60

DuPont, Pemex Team Up For Mexican TEL Plant

E. I. duPont de Nemours & Co. is extending its tetraethyl lead operations to Mexico. The Wilmington, Del., concern has teamed up with Petroleos Mexicano to build an $8.5 million plant at an as yet undisclosed site.

DuPont's share in the venture will be 49 percent, with Pemex, an agency of the Mexican government, holding the majority interest. DuPont will provide design and engineering information, as well as technical know-how and training for the plant's personnel.

In addition to meeting Mexico's anti-knock compound requirements, now estimated at $6 million a year, the facility will export TEL to other Latin American countries, according to an announcement from duPont.

Construction is slated to started later this year. Completion is anticipated two years hence.

Food Machinery's Initials May Be Company Name

Food Machinery & Chemical Corporation likes its initials, but is not particularly fond of its somewhat confusing name.

Organized in 1928, various company names have had their influence in this order: Bean Spray Pump Company, John Bean Manufacturing Company, Food Machinery Corporation, Westvaco Chemical Corporation, Food Machinery & Chemical Corporation.

The San Jose, Calif., firm wants to simplify the whole thing. Tomorrow (May 23) the stockholders will vote on a new name: FMC Corporation.

Stereo Rubber Capacity in US: 370,000 Tons by '65

Rubber demand throughout the world should reach 5.4 million long tons by 1965. This represents a sharp gain over last year when an estimated 4.3 million long tons were consumed.

Further, the US should have in place 120,000 long tons of polyisoprene capacity and 250,000 long tons of polybutadiene capacity by '65—for a total of 370,000 long tons of stereo rubbers.

Projected stereo capacity outside the United States is 500,000 long tons, of which four-fifths will be in Iron Curtain countries.

The large figures reported for the Soviet Union and its satellites are not to be discounted. The 400,000 tons planned are largely polyisoprene and, viewed realistically, this makes a lot of sense.

We have known that at least some of the Russian SBR has been of inferior quality. To keep their tire factories turning out acceptable products, the Soviets have had to purchase substantial quantities of natural.

Since they are tied to equipment and know-how based on the natural product, a "synthetic-natural" such as cis-polyisoprene means more to the Russians than to US industry, which has successfully converted the bulk of its usage to SBR and the older synthetics.

Owing to the development of stereo rubbers, it looks like both natural rubber and its replacements must be capable of being produced and sold profitably at prices below 20 cents in the future.

The industry here can look forward

—Continued on page 54

This article is based on a paper presented last week by M. J. Rhoad of Goodyear Tire & Rubber Company before the Chemical Market Research Association in New York. Other CMRA stories may be found above and on pages 5 and 7.

Aerosols at High Speed in '60; Auto Products in Second Gear

Non-food aerosols turned in a sparkling performance in 1960, but for automotive specialties, it was mostly second-gear around the mean curves of recession. According to reports heard by Chemical Specialties Manufacturers Association at the midyear meeting in Chicago last week, non-food aerosol output in 1960 reached 670 million units, up 17 percent over 1959's record 575 million. This represented a total estimated retail value of $870 million. But with the automobile products it was somewhat different.

The usually booming auto wax business took a glancing blow from the economic recession. Production was tallied for CSMA at only 25 million packages, as against 35.6 million the year before.

Antifreeze Somewhat Better

Antifreeze sales, however, did somewhat better than hold their own. Consumption rose to 121 million gallons in 1960, from 120 million the year before, according to the CSMA tally.

Primary ethylene glycol antifreeze accounted for 110.4 million gallons, or 90 percent of the total, with 10.5 million gallons of methanol products. Respective figures for 1959 were 108 million gallons and 12.1 million gallons.

Cooling system chemicals inched backward. About 32 million consumer packages were produced in 1960, as against 33.5 million the year before. Output of all types of cooling system sealers totaled 14,402,957 units in 1960, down sharply from 16,951,626 the year before, it was reported.

And, according to the CSMA data, hydraulic brake fluid producers also pulled up short, turning out only 10.5 million gallons in '60 as against nearly 12 million estimated for 1959.

Reasons for the decline in production, CSMA automotive division report says, "were an unusual inventory buildup during 1959 coupled with the generally depressed business conditions in 1960."

In other reports to the CSMA conclave, Dr. Emil G. Klarmann declared proposed regulations to the federal household substances labeling act "could bring about

—Continued on page 54

Helene Curtis Looks To Younger Clientele

Helene Curtis Industries, Inc., the cosmetics manufacturer long used to doing business with the American woman, is now getting ready to do business with her offspring.

The Chicago concern is planning to acquire Pyramid Rubber Company, Ravenna, Ohio, manufacturer of the "Evenflo" line of baby-feeding equipment.

The deal would involve more than $20 million, but would exclude the 20 percent stock interest Pyramid holds in the sporting goods firm of A. G. Spaulding & Bros., Inc.

Stockholders of Helene Curtis will vote on the proposed merger this summer.

Paraxylene Facility Lines Up Buyer First

A new paraxylene unit, with its output already contracted to "a large European chemical complex," has been slated for Suntide Refining Company's plant at Corpus Christi, Tex. Suntide, a wholly-owned subsidiary of Sunray Mid-Continent Oil Company, Tulsa, Okla., pegs the unit's capacity at 15 million pounds a year, but has not disclosed costs.

Construction contract has been awarded to Ralph M. Parsons Company, Los Angeles, with completion scheduled for January 1962.

Operating in conjunction with Suntide's "Udex," orthoxylene and ethylbenzene units, the process will represent a further

—Continued on page 60

Phillips, Japanese Company Sign Synthetic Rubber Pact

Phillips Petroleum Company, Bartlesville, Okla., has licensed its cis-polybutadiene synthetic rubber process to Bridgestone Tire Company of Tokyo, Japan.

Tokyo firm will build a 10,000-ton-a-year plant in Japan, using the Phillips process. Phillips will furnish the process and serve as technical adviser on engineering, construction and initial operation of the facility.

Anhydrous Hydrazine Unit Is Put on Stream by Olin

The liquid rocket fuel that will power Dyna-Soar has gone into volume production at an Air Force plant near Saltville, Va. Dyna-Soar, a boost-glide vehicle now under development, is designed to carry an American on a pilot-controlled orbital flight.

The plant, reportedly the world's largest for the manufacture of anhydrous hydrazine, was built and will be operated for the Air Force by Olin Mathieson Chemical Corporation under a three-year $25 million contract.

The $15 million facility is highly automated and requires a full complement of about 100 men, Olin reports. It will operate on a round-the-clock production schedule.

Anhydrous hydrazine is an inorganic fuel made basically from caustic soda, chlorine and ammonia. For the Titan II missile, it will be mixed with unsymmetrical dimethyl hydrazine (UDMH).

The Week's Price Changes

Cadmium Pigments, Copper, Copper Chemicals, Tin Advanced. Ascorbic Acid, Pentaerythritol, Sodium Ascorbate Reduced.

Prices Advanced

Cadmium pigments, 3c to 7c. per lb. (p. 53).
Coconut oil, crude, Pac. coast, ¾c. per lb. (p. 55).
Copper metal, 1c. per lb. (p. 33).
Copper chloride, cupric, ½c. per lb. (p. 33).
Cuprous, 7/10c. per lb. (p. 33).
Copper carbonate, 55c. per 100-lbs. (p. 33).
Copper sulfate, cryst., 25c. per 100-lbs. (p. 33).
Monohydrate, 35c. per 100-lbs. (p. 33).
Tribasic, 35c. per 100-lbs. (p. 33).
Copra, $2.50 per ton (p. 55).
Ouricury wax, 2c. per lb. (p. 55).
Peanut meal, $1 per ton (p. 55).
Tall oil fatty acid, 1c. to 1¼c. per lb. (p. 55).

Prices Reduced

Ascorbic acid, 45c. per kilo (p. 44).
Cassia, $1 per lb. (p. 48).
Cocoa butter, ½c. per lb. (p. 55).
Cottonseed oil, crude, ¼c. per lb. (p. 55).
Refd., ½c. per lb. (p. 55).
Corn oil, crude, ¼c. per lb. (p. 55).
Refd., ¼c. per lb. (p. 55).
Linseed meal, $1 per ton (p. 55).
Monopentaerythritol, 1½c. to 2c. per lb. (p. 39).
Pentaerythritol, tech., 2c. per lb. (p. 39).
Sodium ascorbate, 45c. per kilo (p. 44).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

May 19, 1961	May 12, 1961	May 20, 1960
113.32	113.11	110.29

Chemical Foreign Trade Waning?

World outlook on chemical trade is for continued growth, but the US role, as now shaping up, promises to be unspectacular. Factors in today's trade picture, says an economist from E. I. duPont de Nemours & Co., make it unlikely that chemical outgo from these shores will continue to expand "at the very satisfactory rate of recent years." Moreover, despite lower wage rates abroad, chemical imports into the US are unlikely to accelerate above the current growth rate.

Addressing the National Industrial Conference Board in New York last week, duPont's Ira T. Ellis noted that with the expansion of European chemical capacity, the US has lost its position as exclusive source of supply for many chemicals.

Lower Wage, Manufacturing Costs

"With their lower wage rates and lower overall manufacturing costs," Mr. Ellis went on, "European chemical producers have a substantial advantage, especially in their local markets."

"But," he assured his audience, "the outlook is not all black. So long as we can avoid World War III, we may expect growth in industrial production in the western world and therefore in the demand for chemicals and products. The chemical industry of the US should continue to participate in this growth."

Further, American exporters can expect to benefit from the current drive to re-

—Continued on page 36

LATIN AMERICAN MANAGER: David B. Orden, named manager of Latin American operations for the international division of Metal & Thermit Corporation, New York.

Turpentine Poison Idea Is 'Poison' to the Trade

Turpentine producers and distributors are riled up over intentions of Food & Drug Administration to classify their product as a highly toxic substance.

Also, they feel let down because the agency failed to enlighten them sooner on the kind of labeling it would require for turpentine under the new hazardous articles labeling law.

Since the issuance of tentative regulations under the new law last April 28, FDA has received a number of protests against the August 1 deadline for changing present

—Continued on page 34

Polymethylbenzene Priced

New market development prices for two polymethylbenzenes have been established by Enjay Chemical Company, a division of Humble Oil & Refining Company. "Pseudocumene" (1,2,4-trimethylbenzene) is available in carload-drum quantities at 13 cents a pound; the new less-than-carload-drum price is 14½ cents per pound. "Durene" (1,2,4,5-methylbenzene) is offered at 49 cents a pound in less than carloads.

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Stauffer: Bright Outlook

Things in general look pretty good to Hans Stauffer.

The president of the Stauffer Chemical Company, New York, says 1961 should result in increased sales for the chemical industry, perhaps on the order of 3 to 5 percent. Hopefully, he adds, profit margins will be better at the higher sales level.

Many of the problems which face individual companies and the industry as whole are being attacked and will be solved, Mr. Stauffer believes.

Here are some of the things he had to say last week at the annual meeting of the National Industrial Conference Board in New York:

• Sales of heavy chemicals usually follow general manufacturing activity and should increase 2 to 3 percent in 1961 over 1960.

• Sales of synthetic resins, plastics and fibers — especially high-density polyethylene for blow molded bottles—should increase 4 to 5 percent in 1961.

• The volume of synthetic organic chemicals for dyes, pharmaceuticals, synthetic resins, agricultural chemicals and others should top the 1960 record production by about 10 percent.

•Sales of pharmaceuticals, because of the enormous research effort of the producers, should continue the recent growth rate of 10 percent.

• Assuming normal weather conditions, sales of agricultural chemicals should increase 1 to 2 percent.

• Detergent and cosmetic chemicals sales will probably increase 2 to 3 percent.

• Synthetic elastomer consumption will increase, but because of reduced exports, total sales should be about the same as last year.

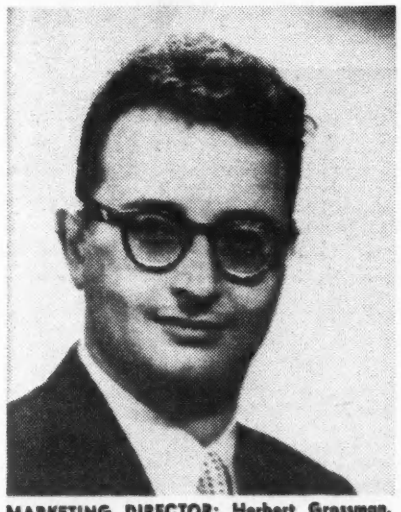
• Industrial gases sales have been increasing sharply in recent

—Continued on page 54

OPD Reports From Europe

Unilever Food Additive 'Episode' Is Running Up a Tab of $2 Million

What is the price of an "episode" in the food additives field? It can be most anything, and right now Unilever is learning just that as it picks up a tab for about $2 million. The bill stems from trouble with the Anglo-Dutch concern's margarine, "New Planta," which was put on the market in Holland and Germany last summer by a Rotterdam subsidiary of Unilever, only to be followed by an outbreak of skin disorders among the people who ate it. The trouble was laid to an "anti-sputtering" emulsifier in the margarine (OPD, 9/26/61) and in all about 100,000 persons were affected.



MARKETING DIRECTOR: Herbert Grossman, appointed director of marketing for Pfizer Laboratories division of Chas. Pfizer & Co., New York.

Unilever has since been paying out claims totaling some $225,000, and spending the balance of the $2 million buying back the product from distributors and storekeepers.

Two Deaths Alleged

Two reported deaths were caused, at least partly, by the additive. As a result (along with the damage claims) there has been a big change in company policy: a complete overhaul of procedures for testing and accepting additives for foods and cosmetics.

Unilever, the big food, detergent, soap, toilet goods and trading empire, which owns Lever Brothers Company in the United States, emphasizes that the official investigation of the additive as the hypothetical cause of the condition hasn't been completed yet, and its compensation to

—Continued on page 37

GSA Refuses $3.7 Million For Morgantown Facilities

General Services Administration last week turned down the offer of $3.7 million made by Deuterium Corporation for the government's big chemical-coke complex at Morgantown, W. Va.

The agency said, however, that the door is still open for further negotiations with the concern, should it wish to participate.

Meanwhile, GSA added, another prospective purchaser has expressed an interest in the property and the offer to sell is being held open for forty-five days while this buyer looks over the property and decides on the kind of offer to make. The agency declined to name the prospect.

The Morgantown Ordnance Works consists largely of a chemical plant and a coke plant built during World War II at a cost of more than $65 million and turned over to GSA by the Defense Department in May, 1958, for disposal.

Maleic From Heyden: Where's It All Going?

Heyden Newport Chemical Corporation, already well aware of the industry's over-capacity in maleic anhydride, has just put on stream at Fords, N. J., a new plant that can turn out another 24 million pounds of the stuff annually.

The market situation in maleic anhydride right now is a peculiar thing. It is estimated (OPD, 12/5/60) that the in-

—Continued on page 34

Chlor-Alkali Industry to Grow At Annual Rate of 4.5 Percent During the Coming Four Years

This article is based on a speech given last week before the annual meeting of the Chemical Market Research Association in New York by Leo B. Grant of Dow Chemical Company. Other CMRA stories appear on pages 3 and 7.

The chlor-alkali industry is expected to grow at a rate of 4.5 percent a year in the next four years. This figure includes chlorine, caustic soda, soda ash and hydrochloric acid. Chlorine will grow 5 percent a year; caustic soda, 4.5 percent; soda ash, 1.5 percent, and hydrochloric acid, 5 percent a year. These rates, with the exception of that for soda ash, are lower than those maintained during the last ten years. But 1965 should see chlorine output at 5.7 million tons; caustic soda, 6 million tons; soda ash, 6.1 million tons, and hydrochloric acid, 1.3 million tons.

Hydrochloric acid is included since the extent of its production is controlled largely by manufacture of chlorinated products.

Chlorine—Historic growth rate has been 11 percent a year. In the last ten years, growth has slowed to 9.4 percent per annum. In the next few years, growth should be 5 percent a year.

Chlorine End-Uses*

	1965	1959
Chemicals	73.5	73.2
Pulp & Paper	17.0	15.0
Water Treatment	3.5	3.9
Other	6.0	7.9
Total	100.0	100.0

* Percent.

Although there has been a great deal of interest in the conversion of hydrochloric acid to chlorine, it's believed this route will not contribute significantly to chlorine output in 1965. Some 95 percent will still be from electrolysis of brine, as it is today.

Caustic Soda End-Uses*

	1965	1959
Chemicals	43.8	43.0
Pulp & Paper	11.6	9.8
Rayon	7.5	9.3
Aluminum	7.1	5.5
Textile	4.8	5.6
Petroleum	5.2	5.1
Soap, Detergents	4.0	4.7
Cellophane	2.8	3.5
Export	4.5	5.2
Miscellaneous	8.7	7.3
Total	100.0	100.0

* Percent.

Hence, in 1965, 5.4 million tons will be made from chlorine-caustic cells (about 200,000 tons greater than today's capacity) and the balance (300,000 tons) from other sources.

Soda Ash End-Uses*

	1965	1959
Chemicals	26.0	34.3
Glass	43.4	38.1
Pulp & Paper	8.4	7.1
Soap, Detergents	6.2	5.4
Aluminum	4.1	3.8
Water Treatment	3.2	3.2
Export	3.1	2.7
Miscellaneous	5.6	5.4
Total	100.0	100.0

* Percent.

End-uses for chlorine are expected to show no remarkable change in pattern, except for this increasing importance of the paper industry as a chlorine consumer.

In chemicals, chlorinated aliphatic hydrocarbons represent the principal area of growth in chlorine consumption, while

—Continued on page 36

SALES SERVICES MANAGER: John R. Hodson, named to the newly-created post of manager of sales services by Texas Butadiene & Chemical Corporation, New York.

Linde Giant Steps: Progress in Gases

Linde Company, a division of Union Carbide Corporation, New York, took two giant steps last week toward getting the lion's share of the industrial gases and cryogenic products markets.

The company officially opened its Huntsville, Ala., liquid oxygen-nitrogen facility and also revealed plans for a $2.5 million expansion and modernization of its manufacturing facilities in Tonawanda, N. Y., which will be devoted to the construction of on-site oxygen, nitrogen and hydrogen plants.

Linde president William B. Nicholson says he expects the industrial gases industry to reach the $650-million-per-year level by 1964. The dollar volume in 1960

—Continued on page 50

Pfizer Men Synthesize Tetracycline Derivative

A new synthetic antibiotic has been developed by research chemists of Chas. Pfizer & Co., New York. According to Pfizer scientists, clinical testing performed to date indicates that the drug is a well-tolerated, broad-spectrum antibiotic of high potency.

Chemically the drug is 6-deoxy-6-de-

—Continued on page 34

Coffee Lipstick Now! What's for Dessert?

It's coffee lipstick now in Paris! This flavorful flash is relayed from the French capital via Dodge & Olcott, Inc., New York.

Introduced there recently was Cafe au Lait lipstick, which reportedly tastes just like the favorite Gallic breakfast brew of coffee and milk. Reaction of the Paris fashion world: "Ooh, la, la!"

On the strength of this public outcry, French cosmetic manufacturers are now going themselves one better. On tap is a companion lipstick called Cafe Noir—strictly for after-dinner.

FDA's Horizon: Congress Asking For the Details

What are the needs of the Food & Drug Administration in the years ahead in terms of money, manpower and facilities? Is the present pace of expansion adequate from the standpoint of effective protection of the public health?

Congress has some doubts and is suggesting to Secretary Abraham Ribicoff of the Department of Health, Education & Welfare that a broad new study of the agency's requirements be instituted to provide new guidelines for future appropriations.

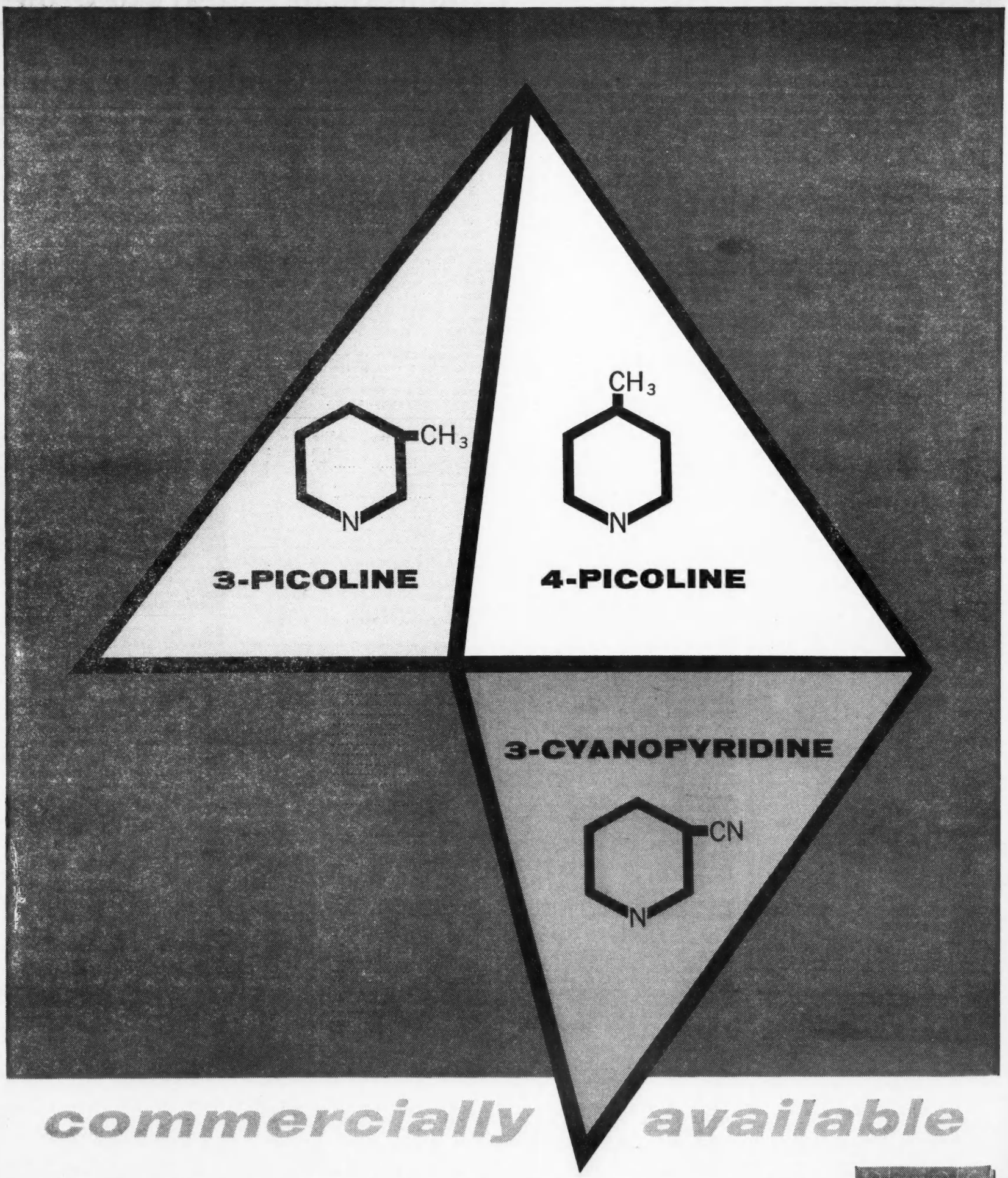
Mr. Ribicoff is in agreement that a new study is advisable, but hasn't yet settled on whether it should be conducted by an independent group outside of the department (such as was done for former Secretary Oveta Culp Hobby by the Citizens Advisory Committee in 1955) or whether it should be done within the department itself. Also, the question of source of funds for the study is still being debated.

Since the 1955 report of the CAC, appropriations for the FDA have risen more than three-fold—nearly in line with the recommendations of the group.

FDA Commissioner George P. Larrick, however, points out that since the study was completed the responsibilities of the agency have been widened to cover such activities as regulation of food additives, color additives, hazardous substances and radioactive contamination.

For fiscal year 1962, FDA is due to get another record appropriation of $23,580,-

—Continued on page 52



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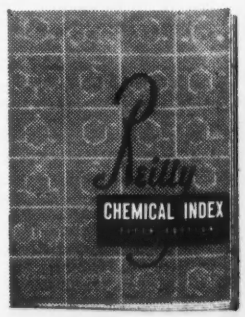

LPG SALES MANAGER: Samuel B. Barley, who on June 1 becomes LPG sales manager of the Esso Standard Division of Humble Oil & Refining Company, New York. He will succeed B. Frank Albanese who will retire on May 31.

BTX and Naphthalene: Can Ovens Compete?

Problem: Can a small cokeoven producer compete with the high-purity petroleum benzene and naphthalene that is fast reaching market floodtide? Solution: Yes by desulfurizing with sodium.

At least, this is the answer as given by Martin Faye, product manager of U.S. Industrial Chemical Company, in a speech last week before the American Coke & Coal Chemicals Institute in Rye, N.Y.

Mr. Faye points out that "although the petroleum companies entered the aromatics field in a grandiose manner," BTX (benzene-toulene-xylene) yields are extremely high quality. Thiophene content is less than one part per million.

While petroleum BTX expansions were running amok, he continues, "only a few cokeoven plants, seeing the handwriting on the wall, girded themselves for competition by installing processes that remove paraffins and thiophene.

"The other cokeoven plants stood pat and hoped to maintain their customers with a thiophene content ranging from 250-1,000 ppm. If a prospect is seeking benzene at 34 cents per gallon, he will certainly purchase the purer product at the same price."

Where does USI fit in? The National Distillers & Chemical Corporation subsidiary has evolved a process which utilizes

—*Continued on page 35*

P&G Detergents Plant Is Slated for Macon, Ga.

Procter & Gamble Company has disclosed plans to build a multi-million dollar synthetic detergents plant at Augusta, Ga.—reportedly the first of its kind in the southeast.

Construction will begin early this fall, with start-up anticipated sometime in early 1963.

In addition to turning out P&G's household detergents—"Tide," "Cheer," "Oxydol," "Premium Duz," "Dreft," and "Dash"—the facility will serve as warehousing and distributing point for southeastern shipments of soap products, toilet goods and food products.

Elsewhere in Georga, P&G already operates an edible oils and shortening plant in Macon. A subsidiary, Buckeye Cellulose Corporation, has a cottonseed and soybean mill in Augusta, and another subsidiary, Clorox Company, operates a household liquid bleach plant in Atlanta.

Essential Oils, Vanilla Beans: Flavoring Men Get the Outlook From Experts on the Market

What's the raw materials outlook? Flavoring Extract Manufacturers Association got the word from two specialists last week at the group's annual meeting in New York. According to Frank Dittrich, a vice-president of the Essential Oils Association, the following oils are expected to remain stable in price: orange, lime (distilled), tangerine, lemongrass (citral) and clove bud. Oil of nutmeg will decline. In doubt: lemon oil. No trends are yet apparent for grapefruit, peppermint or spearmint oils. The other specialist, Ray C. Schlotterer, secretary of the Vanilla Bean Association, sees vanilla labeling the one effective way of clearing up the bean's supply-demand problems.

This is how Mr. Dittrich sizes up the market situation for a number of key essential oils used by flavorers:

Orange Oil — To juice concentrators, the oil is only one of many byproducts and "any reasonable offer" is considered "a profitable offer."

Segregation of Florida orange oil into early season oil and Valencia type has had little effect on prices. West Indian orange oil has entered the market "at a fairly competitive price."

The outlook: "Orange oil prices will remain fairly stable for the next year at least."

Lemon Oil—From the information now at hand, "it appears that due to crop conditions, only about 25 percent of the normal production of lemon oil California will be available."

As for the Italan lemon oil, the market as of the moment "has not fully reflected price-wise the rather critical domestic situation but has remained fairly stable."

The future: in doubt.

Lime Oil—While production is up, demand has also risen and the Mexican Union has encouraged more orderly marketing methods. Result: "We do not anticipate a price decline in the near future for this oil."

Lemongrass Oil — Worldwide demand together with the operation of the Indian sellers has kept the price double its historic norm for eighteen months "and at present there is no sign that the price will be reduced."

Peppermint Oil—Size of new crop, the decisive factor, cannot yet be ascertained due to lack of acreage figures. The past year has been one of relative stability, with supply and demand in balance.

Spearmint Oil — The shortage is certainly over and most large consumers have adequately contracted for the season, but once again the outlook depends on acreage figures not yet available.

Anise Oil—With the embargo continuing on Chinese oil, domestic materials which pose no problem of supply, such as anethol USP, are finding a bigger market.

Cassia Oil—Cinnamic aldehyde, which is present in the natural cassia oil to the

—*Continued on page 50*

CCDA's Spring Meeting Scheduled for This Week

The spring meeting of the Commercial Chemical Development Association will be held Wednesday and Thursday (May 24 and 25) at the Bedford Springs hotel, Bedford, Pa. It will be open to members only.

Subject of the meeting will be "The Toxicological Aspects of Commercial Chemical Development." Speakers at the meeting will include Henry M. Smyth, jr., Mellon Institute; Joseph M. Calandra, Industrial Bio-Test Laboratories, Inc.; Robert L. Terrill, Spencer Kellogg & Sons, Inc.; R. T. K. Cornwell, American Viscose Company; John P. Frawley, Hercules Powder Company; Franklin M. Depew, Food Law Institute; Kenneth Mulford, Atlas Powder Company, and J. Kenneth Kirk, Food & Drug Administration.

CMRA PRESIDENT-ELECT: Borden R. Putnam, jr., of American Cyanamid Company, New York, named president-elect of the Chemical Market Research Association. He will automatically succeed to the association presidency in 1962. (Other CMRA stories appear below and on pages 3 and 5.)

Cyclics in Vanguard Of Flavor Output Hike

Paced by cyclics, US production of flavor and perfume materials climbed 10 percent to 55 million pounds in 1960, the Tariff Commission reports. Sales rose about 4 percent to 47 million pounds, valued at $60 million—up from 45 million pounds worth $57 million in '59.

Production of cyclic materials in 1960 amounted to 33 million pounds, the commission notes in its preliminary report, up 10 percent from 30 million pounds in '59.

Sales of cyclics were 26 million pounds, worth $37 million, as compared with 24 million pounds, worth $34 million in '59. Biggest volume item in this group was methyl salicylate, with production of 3 million pounds.

Acyclic output of 22.3 million pounds, the commission says, was 8 percent better than the 20.6 million produced in 1959. Top chemical in the group was monosodium glutamate, with output of 21.6 million pounds.

Sales of acyclics came to 21.3 million pounds, worth $22.7 million, up from 21.1 million valued at $22.1 million in '59.

The agency says these figures are 95 percent complete. Complete statistics will be given in a final report on snythetic organics to be issued later this year.

Tertiary Butylperoxide Cut

US Peroxygen Corporation has posted a price reduction of 25 cents a pound for 100-pound drums and carload lots of tert-butyl peroxide. New prices are $1.75 a pound for sixteen-gallon, 100-pound drum lots, down from $2 a pound; and $1.71½ a pound for carloads, down from $1.96½ a pound.

Sulfur Projection: Outlook Is Bullish As Use Increases

Chances of a further advance in sulfur prices are rated very strong by top management of Texas Gulf Sulphur Company. Though a boost isn't expected soon—a recent $2 advance is still hitting contracts as they fall due—the long-term outlook is bullish.

The main factor in this improved outlook, says Texas Gulf's president, Claude O. Stephens, is the rising curve of world consumption, which by absorbing French and Mexican producing capacity has already taken the competitive sting out of those new sources of supply.

Canada: The Unpredictable Factor

Canada's long-expected debut in the market adds an unpredictable factor, Mr. Stephens conceded in a luncheon talk last week before the New York Society of Security Analysts.

But he noted that because of high transportation costs from Western Canada, this oil industry byproduct will have to sell about $8 cheaper, f.o.b. mines, to be competitive with US sulfur.

This, it was indicated, could be one factor in holding up the Canadian output.

Mr. Stephens expects Texas Gulf's sulfur sales in 1961 to be equal in tonnage to last year's, with a slight increase in overall sales revenues arising out of the price advance.

Replying to questions from the analysts, he said that the need for a second ocean-going sulfur tanker would become "inevitable" if demand continues to rise as it has. The company recently launched the industry's first ocean-going tanker devoted exclusively to sulfur.

Both the company and its customers have realized cost savings through molten sulfur. The usual 30-cent-a-ton cost of processing dry sulfur has been substantially reduced, Mr. Stephens said.

Turning to potash, Texas Gulf's recent and dramatic diversification move, he estimated that if work proceeds as scheduled the company will have potash on the market by late 1962 (see separate story on page 41).

He reported that as of last week the mine shaft near Moab, Utah, had reached the eighty-foot level, and that the permanent head frame would be completed

—*Continued on page 43*

Gordon Research Parleys Are at Four Sites This Year

Gordon Research Conferences—which in past years have served as the platform for such major scientific disclosures as the development of vitamin B_{12} and the synthesis of quinine—will be held at four sites this summer.

The conferences, whose other "firsts" include announcements on the synthesis of chlorophyll and on isotatic polymers, have in recent years totaled thirty-six sessions at three New Hampshire locations: Colby Junior College, New London; New Hampton School, New Hampton, and Kimball Union Academy, Meriden.

This season six conferences will also be held at Tilton School, Tilton, N.H., to bring the total conference schedule to forty-two sessions during the twelve weeks of free-wheeling scientific discussions (June 12 and September 1).

Conference officials, who expect to draw some 5,000 top-drawer scientists this year from here and abroad, have invited twenty Russians to the 1961 sessions. Among them are Academician Topchev, a high-ranking USSR researcher.

Applications and requests for information should be sent to Dr. W. George Parks, University of Rhode Island, Kingston, R.I.

FTC Boss Warns: 'Clean Up Proprietary Drug Ads'

Paul Rand Dixon, tough, new boss of the Federal Trade Commission, has just laid it on the line for the country's makers of proprietary drugs. Clean up your advertising, says Mr. Dixon, or you are likely to meet up with injunctions and criminal proceedings—a couple of long unused tools of the FTC.

"Some of our tools have become rusty through disuse, but we haven't forgotten them," Mr. Dixon warned members of the Proprietary Association at their annual meeting last week in White Sulphur Springs, W. Va.

Improper advertising of proprietaries is on the increase, said the FTC head, explaining that ten years ago the commission was issuing only about five complaints a year against proprietary drug advertising, but that in 1960 the number had jumped up to nineteen.

"The record in this respect invites a warning against complacency. I urge you to increase your efforts to enlist others in the campaign to eliminate unfair and deceptive advertising," the speaker went on.

The audience was able to gather from his next statement that Mr. Dixon is not alone in his feelings:

"All five members of the Federal Trade Commission are deeply troubled by the content and tone of the thousands of letters complaining about advertising that we receive each year from the public. Many of these are forwarded by senators and congressmen, who add their own expressions of concern."

Explaining just where the FTC stands, Mr. Dixon pointed out that "unfair" as well as "deceptive" acts and practices are unlawful under the Federal Trade Commission act.

"In the field of advertising there has

—*Continued on page 43*

Meeting Dates
May Be Found
On Page 32

For quality basic and specialty chemicals...

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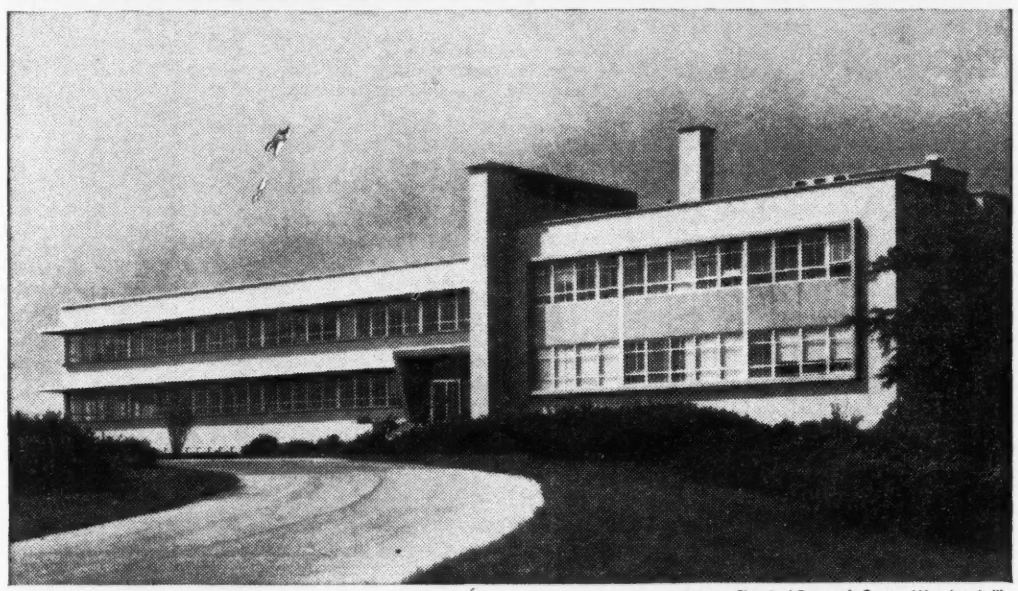

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, May 19 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde, 99%, dms., c.l., frt. alld lb. .12 - —
dms., l.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. .10 - —
Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide, tech. flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, coml., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., c.l., dlvd. E 100 lbs. 13.75 - —
tech., dms., c.l., dlvd. E. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. E .. 100 lbs. 15.25 - —
tanks, dlvd. E ..... 100 lbs. 10.00 - —
USP, tanks, dlvd. E .. 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E ..... lb. .14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l. dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., frt. alld lb. .34½- —
dms., l.c.l., frt., alld ..... lb. .36 - —
tanks, frt., alld ..... lb. .32 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns., dms ..... lb. 42 1.30
Tech., dms., c.l., works ..... lb. .32½- —
dms., l.c.l., works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - 1.45
dms., 100-lb lots, same basis lb. 1.54 - 1.57
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd. (80 mesh), 250-lb dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 450-lb dms., c.l., same basis lb. .56¼ —
(Pink and green granulations 5c. per lb higher.) Freight equald shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt., alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. lb. .50 .55
Acrolein, tech., dms., c.l., works lb .36 - —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., l.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, tanks, frt. alld lb. .38 - —
tech., polymerization, tanks, same basis lb. .38 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd ..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 2.60
di-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms. 1-99 lbs., same basis lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb. .99 - —
fib. dms., l.c.l., dlvd. ... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90%, dms., frt. alld lb 28.80 -28.90
Soln. 20% dms., 200-2,000 lb lots, frt alld lb. 6.50 6.55
2½% dms frt alld. lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb. 1.50 - —
55-lb cbys., 1,045 to 4,... lbs works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd lb .17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, t.p.a. bots. lb 2.75 3.45
NF, bots. lb 3.00 3.30
sweet, USP, cns., dms. ..... lb .79 .79
Aloe, Cape cs. ..... lb. .35 .40
powd., cs. ..... lb .85 .85
Curacao kgs. ..... lb .75 - —
powd., kgs. ..... lb .85 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz	ounce
		E.	east	p-	para
		e.p.	end point	Pac	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular
b.p.l.	bone phosphate of lime	i.&a.	iron and aluminum	resub.	resublimed
				ret.	returnable
b.r.	boiling range	i.b.p.	initial boiling point	SD	specially denatured
bxs.	boxes	imp.	imported		
C.	centigrade	incl.	included	s.d.	single distilled
cbys.	carboys	indust.	industrial	S E.	southeast
CD	completely denatured	kgs.	kegs	sec.	secondary
		l-	laevo	secs	seconds
c.i.f.	cost, insurance, freight	lacq.	lacquer	s.g.	specific gravity
		lb.	pound	shipt.	shipment
cks.	casks	l.c.l.	less carlots	soln.	solution
c.l.	carlots	l.t.l.	less truckload	s.u.	standard unit
cns.	cans	liq.	liquid	syn.	synthetic
coml.	commercial	mfrs.	manufacturers	tanks.	railroad tankcars
conc.	concentrated	m-	meta	tech.	technical
CP	chemically pure	m.a.p.	mixed aniline point	tert-	tertiary
cps.	centipoises			t.l.	truckloads
cryst.	crystalline	min.	minimum	t.w.	tankwagons
cs	cases	m.p.	melting point	USP	U. S Pharmacopoeia
ctns.	cartons	N-	nitrogen		
cyls.	cylinders	n-	normal	vis.	viscosity
d-	dextro	nat.	natural	VM&P	varnish makers & painters
dbl.	double	neut	neutral		
denat.	denatured	NF	National Formulary	W.	west
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	whse.	warehouse
di-	dextro-laevo			w.w	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Alcin, USP, bbls., dms., kgs... lb 3.30 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works 100 lbs 4.30 —
Lump, dms., works ... 100 lbs 5.05 —
Powd., dms., works ....100 lbs 5.20 —
USP, burnt., dms ..... lb .20 .21
hydrous, dms. ..... lb. .07¾ .08
Alum potassium, gran., bgs., works 100 lbs 4.55 —
Lump, dms., works ... 100 lbs 5.30 —
Powd., dms., works.....100 lbs 5.45 —
USP, burnt., dms ..... lb .20 .21
USP, hydrous, dms ..... lb. .07¾ .08
Alum, potash-chrome, dms ... lb. .17 —
Alumina, calcined, bgs., c.l., works lb. .0535 —
bgs., l.c.l., works ..... lb. .056 .0538
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 —
Aluminum chloride coml., anhyd., dms., c.l., works, frt. equald lb. .16 —
dms. l.c.l. works lb 16½- —
cryst., dms., c.l., works 100 lbs 21.00 —
dms., l.c.l. works 100 lbs 21.50 —
Soln., 32° cbys., c.l., works lb .0495 —
cbys., l.c.l., works lb .0570 .1095
tanks, works 100 lbs. 3.95 —
NF, gran., dms. works lb. .31 .32
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼ —
bgs., l.c.l. works lb. .17¼ .19¼
bulk, c.l. basis 80% lb. .14½ —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l. works 100 lbs.11.50 —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk, c.l. same basis ..... lb. .0330- —
Light, bgs., c.l., t.l., works .... lb. .09½- —
bgs., t.l., to c.l., works .... lb. .10½- —
bgs., l.t.l., works ..... lb. .11½- —
Aluminum hydroxide, dried, USP XV fib dms., works lb. .82½ —
fib dms., contract, works lb. 79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 —
9-9½% Al_2O_3, fib dms., works. lb. .19 —
fib dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb pigs 10,000-lb lots, frt alld. lb. .26 —
Aluminum oxide, amorphous (see Alumina, calcined)
Aluminum paste lining, extra-fine, dms lb. 71 - —
Standard grade, dms lb. 48½- —
Aluminum powder lining, extra-fine, dms lb 1.13 —
Standard grade, dms lb .83 —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dm., 1½c per lb for 50-lb dm. 3c per lb. for 10 lb can and 5c to 12c per lb. for smaller containers Deduct 1c per lb. for single shipment of 400 to 1,499 lbs 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs or more Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 —
Aluminum stearate, dibasic, ctns. c.l lb. .39 —
ctns., l.c.l. ..... lb. .40 .44
Monobasic, ctns., c.l. ..... lb. .39 —
ctns., l.c.l. ..... lb. .40 .44
Tribasic ctns., c.l. ..... lb. .39 —
ctns., l.c.l. ..... lb. .40 .44
Aluminum sulfate, coml., grd., bgs c.l., works, frt. equald ton 41.00 - —
bulk, c.l., same basis ton 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs 3.80 - —
bgs., l.c.l., works, frt. equald 100 lbs 4.30 6.30
USP, gran., 400-lb. dm., works. lb. .30 — —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb 1.37 —
Aminoacetic acid, NF, bbls., frt. adjusted lb 1.35 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 1.18
p-Aminobenzoic acid, tech., dry dms., works lb 1.72 —
2-Amino-4-chlorophenol, tech., solid dms., frt. alld lb. 2.15 3.85
p-Aminodiphenylamine, tech., solid dms., frt. alld lb. 3.00 —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb 2.05 - —
dms. smaller lots. ..... lbs 2.50 - —
p-Aminophenol, dms., frt. alld. lb 1.15 - —
Aminophyllin, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald E. of Rockies ton.92.00 - —
refrigeration, tanks, works, frt equald E. of Rockies ton.94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies ton.95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 —
bgs. l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 -
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., cl., works ton 325 - —
dms., ton lots, ex whse 100 lbs.22.86 - —
dms., smaller lots, ex whse 100 lbs.24.11 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works ..... 100 lbs. 9.50 - —

Ammonium bichromate, dms., works lb. 42 .43
Ammonium bifluoride, dms., dlvd lb. 2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. 44 —
dms., l.c.l., same basis lb. 46 —
Ammonium carbonate, USP, lump, dms., c.l. lb. 15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works 100 lbs. 6.00 —
bgs., l.c.l., works 100 lbs. 8.00 8.45
USP, gran., 250-lb. dm. lb. 17¼ —
Ammonium citrate, dibasic, 250-lb. dm., f.o.b. works lb. 77 —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works, E lb. 45 - —
Ammonium hydroxide (see Ammonia, aqueous)
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.51 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld. lb. 20½- —
dms., l.c.l., frt. alld lb. 21½- —
tanks, frt. alld lb. 19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 —
bgs., l.c.l., works 100 lbs. 3.40 3.65
Ammonium linoleate, 80%, dms., works lb. .50 .55
Ammonium molybdate, CP, cryst., 400-lb. dms., 15,000-lbs. works lb. 1.22 - —
400-lb. dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N., bgs., f.o.b. works ton.67.00 - —
Ammonium nitrate, dom., with dolomite, 20.5% N., bgs., c.l., Hopewell, Va. ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.70.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works, E lb. 28½- —
Tech., powd., 200-lb. dm., same basis lb. 28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.15.27 - —
bgs., smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate, powder $1c per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms. lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld. lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., t.t.l., works 100 lbs. 3.20 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, bb. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms. lb. 4.20 - 5.60
d-Amphetamine sulfate, bb. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, bb. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l. dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., c.l. dlvd. lb. .20½- —
tanks, dlvd lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l., frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .28 - —
dms., l.c.l., works lb. .29 - —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms lb 1.50 -
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls lb. .90 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline, dms., c.l., frt. alld. lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Turkish, bgs. lb. .24 - —
Spanish, bgs. lb. .28 - —
Anisic aldehyde, dms lb. 1.50 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt. alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs., l.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½- —
cs., c.l., mines lb. .33 - —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- .30
bgs., l.c.l., frt. alld. lb. .28 - .31¼
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd., bbls lb. .18 - .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. 75 —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .0.31 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l. works lb .06½- .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF c.l. (30 tons) mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 6.35 - —
dms., less than 100-kilos kilo. 6.60 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J. ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 - —

Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton 21.00 - —
85-300 penetration, tanks, tankwagon, refy. ton 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 6.50 - 7.50
Atropine sulfate USP, bots oz. 5.25 5.75
Azelaic acid, bgs., c.l., divd. lb. .40 - —
bgs., ton lots, same basis lb. .41 - —

B

Bacitracin, sterile, over 500,000,000 units 50,000 units. .90 - —
non-sterile, over 500,000,000 units, 50,000 units. .65 - —
Balm of Gilead buds, dried, bgs lb. 1.25 1.35
Barberry root bark, bgs lb. 1.00 1.10
Barbital, NF 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton 111.50 - —
bgs., smaller lots, works ton 126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride anhyd., bgs., c.l., works ton 176.00 - —
bgs., t.c.l., works ton 196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs. c.l., works, 100 lbs. 2.00 - —
bgs., t.c.l. works 100 lbs 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 208.00 - —
bgs., t.c.l., t.l., frt equald ton 218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs. 11.25 - —
bgs., t.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls. c.l., t.l., divd. lb. .16 - —
bbls., t.c.l., t.l., divd. lb. .17 - —
Barium oxide, grd. dms., c.l., t.l., frt equald ton 275.00 - —
dms. t.c.l., t.l. frt equald ton 285.00 - —
Barium peroxide, dms. frt. equald. lb .20 - —
Barium stearate, ctns. c.l., frt. alld. lb. .41 - —
ctns., t.c.l. same basis lb. .42 .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19 - —
Barium sulfide, dms., c.l., works, ton 100.00 - —
dms., t.c.l., works ton 110.00 - —
Barytes, southern off-color, bgs. mines ton 30.00 - —
95-75%, bgs., mines ton 30.00 - —
white, water-grd paper bgs. c.l. St. Louis ton 60.00 -60.25
paper bgs., ex whse New York ton 84.85 —
Battery acid, cbys., c.l., works E. 100 lbs 2.35 —
cbys, t.c.l., works, E. 100 lbs 2.65 -10.95
Bauxite, bulk, mines ton 7.00 -10.00
Bay oil NF Puerto Rican 50-55% cns. lb. 4.00 - —
55-60%, cns. lb. 4.00 - —
NF, West Indian, 50-55%, cns. dms. lb. 4.25 - 4.50
Bayberry wax, bgs lb. .65 - .70
Beeswax, crude, African, bgs. lb. .52 - .54
Brazilian, bgs. lb. .56 - .57
Central American, bgs. lb. .56 - .57
Chilean, bgs. lb. .57 Nom.
Refd. USP, bleached white, bricks 100-lb. ctns lb. .67 - .69
white, slabs, 100-lb. ctns lb. .66 - .68
yellow, bricks, 100-lb. ctns lb .59 .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls lb. .24 - .26
Belladonna root, bls lb. .35 - .38
Bentonite, dom 200 mesh, bgs., c.l., mines ton 14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton 95.20 - —
bgs., 1-ton lots, ex whse ton 99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton 93.40 - —
bgs., 1-ton lots ex whse ton 97.16 - —
Benzal chloride cbys., works lb. .44 - —
Benzaldehyde, NF, dms lb. .74 - —
Tech., dms., c.l., t.l. lb. .42 - —
dms., t.c.l. lb. .44 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La gal. .34 - —
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 - —
Houston, Tex. gal. .34 - .40
Johnstown Pa gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Port Arthur, Tex. gal. .34 - —
Benzene, pure or nitration, tanks, works:
St. Louis, Mo. District gal. .34 - —
Sparrows Point, Md. gal .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind. gal. .34 - —
Youngstown, Ohio gal. .34 - —
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, divd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, divd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., t.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., divd. lb. 2.20 - —
AAOT, bbls., divd. lb. 2.55 - —
Lightfast, bbls., divd. lb. 3.40 - —
Benzocaine, dms. 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., t.t.l., same basis lb. .29 - .41
tanks, same basis lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. lb. .52 - —
Benzophenone, dms lb. 1.35 - 1.40
Benzotriazole, tech. dms., 1,000-lb lots, works lb. 1.98 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald. lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
cbys., t.c.l., same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 1.08
Benzyl acetate, f.f.c., cns. dms lb. .54 - —
Benzyl alcohol, NF, dms. lb. .54 - —
Tech., dms., dlvd lb. .47½ .65
Benzyl benzoate, USP, 40-lb dms. lb. .62 - —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 - —
dms., t.c.l., same basis lb .24 - —
tanktrucks, dlvd., Metropolitan area lb. .21 - —
Benzyl cinnamate, cns lb. 3.80 - 4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms., same basis lb. 1.35 - —
1-11 dms., same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.70 1.85
Benzyl isoeugenol, cns lb. 8.20 8.30
Benzyl propionate, bots lb. 1.30 - 1.35
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 56.50 - —
Berberine hydrochloride, bots lb. 56.50 - —
Bergamot oil, nat., NF Italian, cns. lb. 11.00 -12.00
Betagammapicoline (see b.g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride tech.).
Biotin, cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil crude cns. lb 1.50 1.90
Rectified, cns. lb 1.75 2.00
Bismuth chloride, tars lb 5.11 —
Bismuth hydroxide dms lb 4.60 4.65
Bismuth metal hxs ton lots lb 2.25 —
Bismuth nitrate, cryst., 200-lb. dm. lo. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.92 - —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb. 3.70 - —
Bismuth subgallate, NF 200-lb dm. f.o.b. works lb 3.98 - —
Bismuth subiodide fib dms lb 5.37 - —
Bismuth subnitrate NF, 200-lb dm., f.o.b., works lb. 3.10 - —
Bismuth subsalicylate USP, 100-lb dm, f.o.b. works lb 4.15 - —
Bismuth trioxide 100-lb. dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .30½- —
Bisphenol-A, bgs., c.l., t.l., less than same basis lb. .31 - —
bgs., t.c.l., same basis lb. .32½- —
Blackberry root bark, bls lb. 50 .55

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton 160.00 —
bgs., t.c.l., works ton 170.00 - —
bgs., t.c.l., New York whse ton 215.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton 5.50 —
Bloodroot, bls. lb .85 .90

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms lb. 2.05 - —
Peruvian, dms. lb. 1.65 - —
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls. lb. 1.50 - —

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Bone black, dms., c.l., frt. alld lb. .1750- .2225
t.e.l.; works ... lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb higher
Bonemeal, steamed, works, E. ton.100.00 - —
Bone phosphate defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate tribasic)
Borax, tech anhyd., 99½%, bgs., c.l., works ton.92.00 - —
bgs. ton lots, ex whse. New York or Chicago 100 lbs. 7.67 - —
bgs. smaller lots same basis 100lbs. 8.91 -10.91
bulk c.l. works ton 83.00 —
tech., gran., decanydrate, 99½%, bgs., c.l., works ton.50.00 - —
bgs. ton lots, ex whse. New York or Chicago 100 lbs. 5.31 - —
bgs smaller lots same basis 100 lbs. 6.56 - 8.56
bulk c.l. works ton 43 50 —
tech., pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs smaller lots same basis 100 lbs. 7.37 - 9.37
bulk, c.l. works ton.58.00 —
USP powd. bgs c.l. works ton.54.00 —
bgs ton lots ex whse New York or Chicago 100 lbs. 6.57 - —
bgs. smaller lots same basis 100 lbs. 7.82 - 9.82
Bordeaux powder tribasic bgs. c.l., dlvd lb. .24 - —
bgs. t.e.l., same basis lb .26 - —
Boric acid tech. anhyd 99.9% bgs., c.l. works ton.335 00 - —
bgs ton lots, ex whse. New York or Chicago 100 lbs.21.27 - —
bgs. smaller lots same basis 100 lbs.22.52 -24.53
cryst. 99.9% bgs. c.l. works ton.163.50 —
bgs ton lots, ex whse. New York or Chicago 100 lbs.11.67 —
bgs. smaller lots. same basis. 100 lbs.12.92 -14.93
Boric acid, tech. cryst., 99.9%. dms. c.l., works ton.188.50 —
dms., ton lots, ex whse., New York or Chicago 100 lbs.13.17 - —
dms., smaller lots, same basis 100 lbs.14.42 - —
gran., 99.9%, bgs., c.l., works. ton.112.00 - —
bgs. ton lots ex whse New York or Chicago 100 lbs. 8.78 - —
bgs smaller lots same basis 100 lbs.10.03 -12.03
dms. c.l. works ton 137 00 —
dms ton lots, ex whse, New York or Chicago 100 lbs.10.29 - —
dms smaller lots same basis 100 lbs.11.54 - —
bulk c.l. works ton.106.00 —
powd., bgs., ton lots ex whse., New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots same basis 100 lbs.10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs.10.71 - —
dms., smaller lots, same basis 100 lbs.11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb 2.75 - —
Boron trichloride CP 1,800-lb. cyls., works lb 1.25 - —
100-lb cyls. works lb 1.70 - —
Boron trifluoride gas, cyls., t.l., works lb .70 - —
cyls., t.t.l. works lb .70 - —
Brimstone (see Sulfur).
Broenner's acid bbls lb 1.53 —
Bromine purif., cs. c.l., t.l., dlvd. E of Rockies lb. .32 —
cs., t.t.l. same basis lb. .34 .39
Bromine, purif., ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 —
ret. dms. t.e.l. same basis lb. .31 .34
tanks, same basis lb. .31½ —
Bromochloromethane dms. c.l., frt. equald lb 48 —
dms., t.e.l., same basis lb 50 —
tanks, same basis lb 47 —
Bromoform, pharmaceutical grade, 5-gal cby. frt. equald lb 1.95 —
Bromstyrol bots lb 5.25 5.35
Brucine cns oz Nominal
Brucine sulfate, NF cns oz 1.45 1.75
Buchu leaves, bbls lb. .60 - .65

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example prices on Brown iron oxide, may be found in the I's under Iron oxide brown

Butadiene (etd cyls. c.l., refy lb .21 —
cyls., t.e.l., refy lb .22 —
tanks, dlvd lb .12¾- —
Butene-1 tanks works lb .0625- —
Butene-2 tanks works lb. .0570- —
n-Butyl acetate ferment, dms., c.l., frt. alld lb. .17 —
dms., t.e.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn. dms c.l. dlvd E lb. .17 —
dms., t.e.l. same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate syn. dms., c.l., dlvd E lb. .14¾- —
dms., t.e.l. same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate dms. c.l. or t.l., straight or mixed frt. alld. E lb. .37½- —
dms., t.t.l., same basis lb. .38½- —
tanks, same basis lb. .35 - —
n-Butyl alcohol ferment, dms., c.l., frt alld lb. .18 —
dms., t.e.l. frt. alld lb. .19½- —
tanks, frt. alld. lb. .15½- —
Sec-synthetic dms., c.l., dlvd lb. .15 —
dms., t.e.l., dlvd. lb. .16½- —
tanks dlvd lb. .13½- —
Tert-synthetic, dms., c.l., frt. alld., dlvd. E lb. .16 - —
dms., t.e.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms. c.l., works lb. .37½- —
dms. t.e.l. works lb. .38¼- —
n-Butyl ether dms., c.l., works lb. .35¼- —
dms., t.e.l., works lb. .36 - —
tanks, works lb .33¼- —
Butyl lactate dms. c.l. frt. alld E. Rockies lb. .42½- —
dms. t.e.l. same basis lb. .43¼- —
tanks, same basis lb. .40 —
Butyl laurate dms. works lb. .37½- —
Butyl methacrylate dms., c.l., t.l., works lb. .35 —
dms. t.e.l. works lb. .35½- —
Butyl oleate, refd. dms., t.e.l., works lb. .32 - —
Butyl phenylacetate, dms. ..... lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, CP, dms., t.e.l., frt. alld. E. of Rockies.... lb. .27¼- .28½
tech., dms., c.l., same basis.... lb. .25¼- —
Butylamine (see Mono-, Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., t.e.l., same basis ..... lb. .47½- —
tc., t.t., same basis ..... lb. .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd. .. lb. 4.75 - —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3-Butylene glycol, dms. c.l., t.l., dlvd lb. .20½- —
dms., t.e.l., t.t.l., f.o.b. works lb. .22 - —
tanks, dlvd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., frt. alld lb. .25½- —
bgs., t.e.l., same basis..... lb. .26½- —
tanks, same basis..... lb. .23½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 —
dms., t.e.l., dlvd. ..... lb. .23½- —
tanks, dlvd ..... lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., t.e.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms., t.e.l., same basis lb .43 - —
n-Butyronitrile, dms., c.l., dlvd lb. .56½- —
dms., t.e.l., dlvd. ..... lb. .57½- —
tanks, dlvd. ..... lb. .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt alld E of Rockies lb 5.55 - —
Light shade, bbls same basis lb 4.65 - —
Medium shade, bbls., same basis. lb. 5.30 - —
Cadmium CP red, medium, light shade, bbls., same basis. lb. 4.90 - —
Orange-red shade, bbls., same basis lb 4.30 - —
Yellow all shades bbls. frt alld E. of Rockies lb. 3.02 - —
Cadmium chloride 400-lb dms., f.o.b. shipping point lb. 1.56½- —
Cadmium iodide 25-lb fib dms in o 75 1.00
Cadmium metal ingots or sticks, ton lots, cs. dlvd lb. 1.60 - —
Cadmium nitrate purif cryst. 400-lb. dms., less than 5,000 lbs. f.o.b shipping point. lb. .94 - —
400-lb dms. 5,000 lbs or more same basis lb. .90 - —
Cadmium-mercury lithopone orange, deep shade bbls frt alld E. of Rockies lb. 1.73 - —
Cadmium-mercury lithopone red, dark shade, bbl- same Basis lb. 2.03 - —
Red, light shade bbls. same bas lb. 1.80 - —
Red, medium shade bbls same basis lb. 1.95 - —
Red, medium light shade bbls same basis lb. 1.88 - —
Red, maroon shade bbls same basis lb. 2.11 - —
Cadmium-selenide lithopone maroon, bbls., frt alld E of Rockies lb. 2.84 - —
Orange, bbls., same basis ..... lb. 1.66 - —
Cadmium-selenide lithopone red, orange-red shade bbls. same basis lb. 1.80 - —
Red, dark shade bbls. same basis lb. 2.64 - —
Red, light shade bbls. same basis lb. 1.96 - —
Red, medium shade bbls. same basis lb. 2.31 - —
Red, medium-light shade bbls same basis lb. 2.06 - —
Cadmium-selenide, lithopone, yellow, all shades bbls. frt alld E. of Rockies lb. 1.27 - —
Caffeine NF citrated ums 100 lb lots or more lb 2.70 —
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld lb. 2.25 - —
hydrous, powd., 150-lb. dms., frt. alld lb. 2.25 - —
USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld lb. 2.40 - —
Cajuput oil, native cns lb 1.75 2.00
Redist USP cns lb 1.90 2.10
Calamine USP dms lb .34 —
Calamus oil bots lb 12.00 20.00
Calciferol cryst 10-kilo or more lots works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol (in edible oil (see Viosterol)
Calcium p aminosalicylate trihydrate fib dms 100 lbs or more frt adjusted lb 3.10 - —
Calcium bromide NF bars 100 lbs. or more lb 1.10 - —
Calcium carbide standard generator size 600-lb dms. c.l., dlvd ton.149.00 - —
Calcium carbonate nat., dry grd. air floated, 325 mesh, bgs. c.l. works ton 10.50 —
Chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd ½ to 10 microns bgs. c.l. works ton.30.00 —
10 to 20 microns bgs. c.l. works ton 17.00 -18.00
Precip., dense, bgs., c.l., works. ton.30.00 -38.50
bgs. t.e.l., works ton 45.00 53 50
medium bgs c.l. works ton 38.00 —
bgs. t.e.l works ton 48.00 53.00
Calcium carbonate, surface treated bgs. c.l., works ton.42.00 -44.00
bgs., t.e.l. works ton.57.00 59.00
ultrafine bgs. c.l. works ton 117 50 167 50
bgs t.e.l. works ton 137 50 187.50
Calcium chloride conc flake or pellet 94-97% paper bgs., c.l works frt equald ton.39 30 - —
Flake, 77-80% paper bgs., c.l., works frt equald ton 32.00 - —
Liquor, 40% tanks frt equald ton 12.50 - —
Calcium chloride, powd., 77% min., paper bgs., c.l., works, frt. equald ton.38.00 - —
Purif. gran dms lb .27 —
Calcium chloride solid, 73-75%, dms., c.l., frt. equald ton.30.50 - —
dms. t.e.l. works frt equald. ton 36.00 73.00
USP gran. dms. lb .32 —
Calcium chromate, bgs., dlvd lb. .27 - —
Calcium cyclamate, 100-lb. dms lb. 1.85 - —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½- —
USP, powd., 100-lb dm., ton lb. .56½- —
Calcium hydride, lump, dms., works, lb. 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd E. of Rockies cs.27.50 - —
100-lb. dms., same basis ... dm.39.50 - —
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, 25-lb. jars, works. lb. 4.27 - —
Calcium lactate, NF, dms., t.o.b. works lb. .43 - .46
Calcium mandelate USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq. 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo.35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 1.25
Calcium phosphate, dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 - —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton.81.00 - —
bgs. c.l., t.l., f.o.b. Texas City works ton.75.50 - —
bgs., t.e.l., ton 96.00 - —
Feed grade, 21% P., bgs., c.l., t.l., frt. equald ton.97.65 - —
bgs., t.e.l. frt equald ton.107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l., prices
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.95 - —
Tribasic, NF, precip. bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. t.e.l. frt. equald 100 lbs.10.00 - —
Calcium propionate, any quantity, dms., dlvd E. of Rockies. lb. .37 - —
Prices W of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs. or more f.o.b. warehouse N Y lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate hydrated, bgs., c.l., works lb. .06 - —
bgs., t.e.l., works lb. .06½- —
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. .... lb. .39 - —
ctns., t.e.l. .... lb. .40 - .44
Calomel NF mild, powd. dms., 100-lbs., f.o.b. works lb 4.32 - —
NF mild, precip., dms., 100-lbs., f.o.b works lb. 5.67 - —
Camphene 46° m.p. dms incl., c.l., works lb. .15 - —
dms. incl., t.e.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 3.70
Camphor, syn. tech., 1 bbl or more. lb. .45 - —
USP, gran., powd. bbls., 1,000-lb. lots lb. .53 - —
bbls smaller lots .... lb. .54 - —
tablets, ctns., 1,000-lb. lots. lb. .80 - —
ctns., 500-lb. lots .. lb. .81 - —
ctns., smaller lots .. lb. .82 - —
Camphor oil, sassafrassy, dms. lb. .35 .55
White, dms. lb. .36 .50
Cananga oil, native, cns. ..... lb 5.00 6.50
Rectified, cns lb 7.25 -10.00
Candelilla wax, crude, bgs ..... lb. .57 - .58
Refd., pure, bgs ..... lb. .62 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c higher.
Cantharides, Chinese, cs. ..... lb. 1.00 - —
powd., bgs. ..... lb 1.15 - —
Russian bgs. ..... lb 2.00 2.15
powd. bgs. ..... lb 2.15 2.30
Capric acid, dms ..... lb. .27¼- .29¾
tanks ..... lb. .24¾- —
Caprolactam monomer, bgs., c.l., t.l., f.o.b works lb. .52 - —
bgs., t.e.l., t.t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Caprylic alcohol 85% dms., c.l., t.l., works lb. .19 - —
dms., t.t.l., same basis lb. .19½- —
tanks, frt. equald. lb. .16½- —
Sec. 92-98% dms. c.l., f.o.b. works lb. .22 - —
dms. t.e.l., f.o.b. works lb. .23 - —
tanks, f.o.b works lb. .19½- —
Caprylic acid, dms ..... lb. .27¼- .29¾
tanks ..... lb. .24¾- —
Capsicum (see Pepper red)
Capsicum, oil (see Capsicum oleoresin).
Capsicum oleoresin NF from dom. pepper, dms lb 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms lb. 3.75 - —
Caraway seed Danish, bgs. ..... lb. .16 - —
Dutch, bgs. ..... lb. .19 - —
Carbazole, 97%, bbls. ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works ..... lb. .08½- —
bgs., t.e.l., works ..... lb. .16¼- —
furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns, t.e.l., whse ..... lb. .13½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l., works ..... lb. .07¾- —
bgs., t.e.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works lb. .08¼- —
ctns., t.e.l., whse ..... lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb. .05¾- —
bgs., ctns., t.e.l., whse lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., t.e.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., t.e.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton.60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd Metropolitan areas, E ton.55.00 - —
Solid, bulk, wholesale, works ton.85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms. t.e.l., same basis lb. .086 - .091
5-gal dms., 30 dms to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, f.o.b. works ..... lb. .0450- —
Carbon tetrachloride, CP, consumers dms. c.l., frt alld. lb. .13¾- —
dms., t.e.l., frt. alld. lb. .15¼- —
Tech. consumers dms., c.l., t.l., frt. alld lb. .11¾- —
dms. t.e.l. t.t.l. frt. alld lb. .14¼- —
tanks, frt alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms., 100-lb lots, works lb 4.00 4.25
dms. smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots ..... lb.40.00 -43.00
Cardamom seed, bleached "A" lb 3.45 - —
Bleached "B" lb 3 15 - —
Decorticated Alleppey, cs ..... lb 2.70 - —
Guatemala, cs. ..... lb 2.10 - —
Green, Alleppey, bgs ..... lb. 2.10 - —
Ceylon, bgs. ..... lb. 2.10 - —
Carmine No 40, NF, bulk, 100-lb lots or more dlvd. lb 16.80 —
bulk, smaller lots, dlvd lb.16.90 -17.30
Carnauba wax chalky, bgs., ton lots. lb. .65 Nom.
North Country, No 2, crude, bgs., ton lots lb. .73 Nom.
refd., pure, ton lots lb. .76 .77
North Country, No. 3, Ceara, crude, ton lots lb. .59 - .61
North Country, No 3, Parnahyba, crude, ton lots lb. .61 - .62
No. 3, refd., pure, bgs., ton lots. lb. .66 - .68
No. 1, Ceara, yellow, bgs., ton lots. lb. .82 - .83
Parnahyba, yellow, bgs., ton lots. lb. .85 - .86
Powdered carnauba wax, 20 to 160 mesh 8c over lb higher
Carotene tech 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½ —
in carrot oil, 5,000,000 to 8,000,000 A units per lb. dms., works million units. .12 —
USP microcrystalline in oil, 400,000 A units per gram., dms. dlvd million units. .144 —
b-Carotene in vegetable oil semi-solid suspension 400,000 A units per gram cns kilo.57 60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram cns kilo.72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns kilo.240.00 —
Carvol, bots. lb. 5.00 5.48
Cascara sagrada bark, bulk lb. .32 —
Casein, dom. edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
Casein, dom., edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible acid-precip grd., Argentine bgs. c.l. ex-dock Eastern seaports lb. .15¾- .16½
Australian bgs. c same basis lb. .19 .19¼
New Zealand same basis lb .24 .25
Cashewnut shell liquid, treated, dms. c.l., Newark, N.J lb. .24 - —
dms. ton lots, same basis lb. .25 - —
t.w., same basis lb .23½- —
Cassella acid dms. frt alld., 100% basis lb 1 44 1.78
Cassia oil, redist., USP, cns..... lb. 6.50 - 8.00
Cassia, Padang, "A," bls ..... lb .31 —
"B," bls. ..... lb .30 - —
"C," bls. ..... lb 29 - —
Korintje "A," bls. ..... lb. .31 - —
"B," bls. ..... lb .29 - —
"C," bls. ..... lb .27 - —
Castor oil dom., blown, dms., c.l. lb. .2550- —
dms. t.e.l lb .2650- —
dehydrated, bodied, dms., c.l. lb. .2700- —
dms. t.e.l lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., t.e.l. lb. .2660- —
tanks lb .2360- —
hydrogenated, bgs., c.l. lb. .2475- —
bgs., ton lots lb. .2875- —
bgs., t.e.l., dlvd lb. .3075- —
raw, No. 1, dms., c.l. lb. .2200- —
dms. t.e.l lb .2300- —
tanks lb .2000- —
No 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2225- —
tanks lb. .1925- —
refd., deod., dms., c.l. lb. .2650- —
dms. t.e.l. lb. .2750- —
tanks lb .2450- —
USP, dms., c.l. lb. .2350- —
dms., t.e.l lb .2450- —
tanks lb .2150- —
Imported, No. 1, Braz., tanks lb. .17¾- —
No. 3, tanks, same basis lb. .17¼- —
Sulfonated, 50%, dms., works lb. .15 .15½
75% dms. works lb .19 .19½
Castor oil acids, dehydrated, dms. lb. .41¼- .43¼
Split, dms. lb. .33¾- .34¾
Castor pomace, bgs., c.l., works ton.35.00 —
Castoreum nat., cns. ..... lb 5.25 - —
Syn., cns. ..... lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ —
Resub. dms. works lb 4.29½ —
Catnip leaves, Southern, bls lb. Nominal.
Caustic potash (see Potash caustic)
Caustic soda (see Soda caustic)
Cedarleaf oil USP XIII cns., dms. lb. 4.00 - 5.00
Cedarwood oil cns., dms. ..... lb. 1.00 - —
Celery seed oil ..... lb.11.50 - —
Celery seed, French, bgs ..... lb. .36 - —
Indian, bgs. ..... lb. .21 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 .51
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs dlvd, E lb. .595 605
38% butyryl content, bgs., dlvd. E lb. .545 .555
38% butyryl content, half-second, bgs., dlvd. E. lb. .545 - .555
50% butyryl content bgs dlvd. E lb. .585 .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb. .57 - —
bgs. smaller lots, same basis lb. .59 - —
standard, low or medium vis., bgs., c.l., t.l., frt. alld. E lb. .57 - —
standard, low or medium vis., bgs., ton, frt. alld. E lb. .59 - —
(Cellulose gum prices 1c. per lb. higher in west.)
Cerium hydrate (45% CeO fib dms., 100-lb. lots or more lb 1.40 - —
77% CeO. fib dms., 100-lb lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate).

NOW READILY AVAILABLE IN QUANTITY

CELLASE™ 1000

Wallerstein's Cellulose-Degrading Enzyme

Cellase 1000 is a potent purified enzyme preparation of uniform cellulolytic activity now available to manufacturers of pharmaceuticals and food supplements. Standardized at 1000 WCU (**W**allerstein **C**ellulase **U**nits), Cellase 1000 offers the possibility of control of a long neglected phase of human nutrition: **the digestion of vegetable matter high in fiber and roughage.**

A Fungal Enzyme of a New Type

Cellase 1000 is derived from a specially grown strain of *Aspergillus niger.* Chemically it is a highly purified enzyme capable of depolymerizing cellulosic polysaccharides of high molecular weight into fragments of low molecular weight. The exact constitution and nutritional utility of the hydrolysis products depend on many factors, including the type and state of the cellulose initially acted upon.

Some Interesting Uses of Cellase 1000

Aside from the management of geriatric disorders in a progressively aging population, Cellase 1000 can find uses in the correction of dyspepsia, flatulence, certain nutritional insufficiencies, and other GI disturbances of highly contemporary importance. Because Cellase 1000 facilitates the digestion of cabbage, cucumbers, and other "difficult" vegetables, its use for people who have trouble with these foods will allow greater cellulose bulk intake and a concomitant decrease in calorific starches. The implications for the regulation of obesity are plain.

A Pharmaceutically Elegant Enzyme

The whitish color and minimal odor of Cellase 1000 insure its palatability and acceptability in your products, while its high potency and low bulk allow you to formulate smaller and more attractive capsules and tablets than have heretofore been possible. Cellase 1000 is eminently suitable for combination with Mylase® 100 and Prolase® 300, Wallerstein's purified amylase and protease. Further, Cellase 1000 is compatible with most active ingredients, adjuvants and vehicles normally employed in digestive aids and nutritional supplements.

Get in touch with Gerry Gray for samples and your copy of Data Sheet 630 on Cellase 1000.

WALLERSTEIN COMPANY *Division of Baxter Laboratories, Inc.*
Staten Island 3, New York Gibraltar 2-6400

Wallerstein Manufactures Enzymes, Antibiotics and Chemicals for Industry

Cerium Oxide—CMC

Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb 1.85 - 1.90
bgs., smaller lots dlvd lb 2.15 —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb 41½- —
fib cns. l.c.l. same basis lb 43½- —
tanks same basis lb 39 —
Extra, cns. c.l. t.l., dlvd E lb 48½- —
fib cns l.c.l. same basis lb 50½- —
tanks same basis lb 46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb. 1.00 - 1.25
Roman, cs. lb. 1.75 - 2.00
Chamomile oil, blue Hungarian bots lb 350.00 —
Charcoal activated NF fib dms., c.l., works lb. .34 --
fib. dms., 5-ton lots, works lb. .35 .35½
fib dms. smaller lots works lb. .36 .59
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).
Charcoal hardwood, lump, bulk c.l., f.o.b plant ton 55.00 - —
briquets, bulk c.l., f.o.b plant ton 80.00 - —
5-lb paper bgs. c.l., same basis ton 100.00 - —
20-lb paper bgs. c.l., f.o.b plant, ton 90.00 - —
40-lb paper bgs c.l. same basis ton 86.00 - —

Chenopodium oil, NF, cns. lb. 4.75 - 5.00
Chicago acid, paste bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min. dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb lots lb. 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb. lots or less lb 1.05 - —
Chlordan, agricultural dms., c.l., frt. alld lb. .65 - —
dms. l.c.l. 5,000-10,000-lb. lots, frt alld lb. .66 - —
clarified, dms., c.l., frt. alld lb. .69 - —
dms. l.c.l. 5,000-10,000-lb. lots, frt alld lb. .70 - —
Chlorinated paraffin, 40%., dms., c.l., frt alld lb. .15 - —
dms. l.c.l. 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l. works lb. .60 - —
ctns., l.c.l. works lb. .61 - —
125 cps. ctns. c.l., works lb. .70 - —
300 cps. ctns. c.l., works lb. .80 - —

Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area, same basis lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald, same basis 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid mono, flake, 99%, purif. dms., c.l lb. .23½- .25½
dms. l.c.l lb. .24½- —
tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms. l.c.l. frt equald lb. .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .68 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 - —

o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.15 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd lb. .27 - —
dms., l.c.l., dlvd. lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .90 - —
Powd., dlvd. E., 100% basis lb. 1.00 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms. frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
o-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .25 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. l.c.l., same basis lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosultonic acid, dms., c.l., frt. equald lb .0465- —
dms., l.c.l. frt equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c per lb higher
o-Chlorotoluene, tech. dms., t.l., works lb. .37 - —
dms., l.c.l., t.l.l. same basis lb. .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 - —
Choline chloride, 100-lb dms., frt. equald lb. 1.25 - —
Choline dihydrogen citrate, 100-lb. dms., frt. equald lb. 1.25 - —
Chrome green CP dark, light, medium blue content, 1-15%, bbls. dlvd E of Rockies. lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
41-45%, bbls., same basis. lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W. of Rockies.
Chrome orange CP bbls., dlvd. E. of Rockies lb. .35 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow CP bbls., dlvd. E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 - —
Chromium fluoride bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l., frt alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb .25 - —
NF, yellow, broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots lb. 1.50 - 1.60
Cinnamic aldehyde dms. lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .53 - —
Ceylon, No. "0000," bgs. lb. .73 - —
Cinnamon bark oil, bots lb. 55.00 - 74.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), cns., dms lb. 8.50 - 13.50
Citral, CP, bots. lb. 4.50 - 5.00
Extra, bots. lb. 3.60 - 5.00
Syn., dms. lb. 7.25 - 7.40
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28½
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms. lb. 1.00 —
Java-type, dms. lb. 1.00 - 1.20
Citronellal, bots., dms. lb. 1.40 - 1.60
Citronellol, bots., dms. lb. 1.90 - 2.50
Synthetic, dms. lb. 1.70 - —
Civet, artif., bots. lb. 13.75 - 15.00
Nat. bots. oz. 8.50 - 15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.50 - 21.50
crushed shed moisture, bulk, c.l., Tenn ton. 8.00 - 11.25
Imp., airfloated, bgs., c.l., Atl. port net-ton. 43.00 - 47.00
lump, bulk, Atl. port net-ton. 31.50 - 37.50
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works, ton. 11.00 - 17.00
Georgia, bgs., l.c.l., works, ton. 13.50 - 22.50
Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me. long-ton. 23.00 - 35.00
white, powd., bgs., c.l., ex dock net-ton. 50.00 —
bgs., l.c.l. ex whse net-ton. 60.00 - 70.00
Cleaners naphtha, petroleum, 105° F Flash, tankcars, New Jersey and New York gal. 18 —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140° F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.6, tech., solid, dms. frt. alld lb .77 - —
1.7 tech., dms. frt alld lb 2.20 - —
Clove bud oil, USP, dms. lb. 2.65 - —
Cloves, Madagascar, bgs. lb. .35 - —
Zanzibar, bgs. lb. .37 - —
Clove leaf oil, crude, dms. lb. 1.10 - —
CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dvld. E., 100% basis lb. .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .46
65% low or medium vis., bgs., c.l., dlvd. E., 100% basis lb. .40 - —
l.c.l., dlvd. E., 100% basis lb. .42 - 1.00
purif. high vis (see Cellulose gum)
CMC prices W. of the Rockies are 1c. per lb. higher and are on a dlvd. basis.

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Basic chemicals play a big part in producing many of the items that make vacations fun. They process the wool, cotton and rayon used to make bright, gay, carefree vacation clothing. They're essential in producing the variety of paper products—road maps, tour booklets, plane tickets—needed. They're involved in producing fuel for car, train, plane, boat, or bus. And both camera and film for recording vacation fun are made with their aid. PPG's Chemical Division supplies Columbia-Southern Chemicals—including chlorine, caustic soda, and soda ash—to just about every manufacturing industry. If you use basic chemicals as raw materials or processing aids in your products, you'll like doing business with PPG Chemicals.

columbia | southern chemicals
CHEMICAL DIVISION
PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER PITTSBURGH 22, PENNSYLVANIA

Coaltar, crude, resale for soln., tanks, works gal. .17 · —
Refd., resale, indust., dms., c.l., ex whse gal. .35 · —
dms., l.c.l., ex whse gal. .39 · —
tanks, works gal. .30½ · —
Coaltar pitch, aluminum, bulk, Works ton.42.00 · —
Carbon, bulk, works ton.42.00 · —
Indust., bulk, works ton.44.00 · —
Core, bulk, works ton.40.50 · —
Fiber, bulk, works ton.48.00 · —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks, works ton.41.00 · —
Cobalt acetate, 23.7% Co., dms., dlvd lb 1.04 · —
Cobalt blue, genuine, 250 lb. bbls., dlvd E of Rockies lb. 4.90 · —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue (imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.43 · —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 · —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 · —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms lb. .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 · —
Cobalt naphthenate liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co., bbls., dlvd, lb. .75 · —
Cobalt oxide, black, ceramic grade, 72½ 73½% Co., kgs., dlvd E of Mississippi R. lb. 1.15 · —
70-71% Co kgs., same basis lb 1.12 · —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb. 1.35 · —
Cobalt resinate, fused, 3% Co., dms. lb. .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 · —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 · —
Cobalt tallate 6% Co., dms. dlvd, lb. .44 · —
Cocaine, USP crns., 100-oz. lots, f.o.b. works oz.17.50 · —
Cocaine hydrochloride, crns., 100-oz. lots f.o.b. works oz.13.75 · —
Cocillana bark, bls lb. .18 .20
Cocoa butter, bgs lb. .54½- .59½
Coconut oil, crude tanks New York lb. .11¾- —
tanks, Pac. coast lb. .11⅞- —
Refd., deodorized, dms. lb. .19 · .20
Coconut oils, acid, dist. dms. lb. .21½- .24
tanks lb. .19 · —
double dist. (stripped), dms. lb. .22½- .25
tanks lb. .20 · —
Cod oil, dms., spot lb. .08¼- .08½
Codeine, NF crns., 100-oz. lots oz.13.25 · —
Codeine hydrochloride crns., 100-oz. lots oz.11.75 · —
Codeine phosphate, USP, crns., 100-oz. lots oz.10.25 · —
Codeine sulfate USP crns., 100-oz. lots oz.10.75 · —
Codliver oil, USP, dms gal 1.40 · 1.70
Cohosh root, black, bls lb .20 .25
Blue, bls lb .20 .25
Colchicine, USP, bots. 27.50 · 29.00
Colchicum root, bls lb .35 .45
Colchicum seed, bgs. lb. .85 .90
Collodion, USP, dms. lb. .32½- —
USP flexible dms. lb. .34 —
Colocynth pulp, bls. lb. .75 · —
Colombo root, bls lb. .16 · .18
Condurango bark, bls lb. .18 .20
Congo copal gum, No. 1, bgs lb. .26 · .27
No. 2, bgs. lb. .23 · .25
No. 3, bgs lb. .21 · .24
Copaiba balsam, crns., dms. lb. .80 · .90
Copaiba oil, crns lb. 1.35 2.00
Copper acetate, bbls., c.l., works. lb. .53 · —
bbls., l.c.l., works lb. .54 · —
Copper carbonate, 55%, dark dense, c.l., works lb. .3545- —
bgs., l.c.l., works lb. .3695- —
Copper chloride, cupric, anhyd., dms., works lb. .44½- .45
cryst., dihydrate, dms., works, lb. .30¾- .31¼
cryst., dried, dms., works lb. .38¾- .39¼
cuprous, dms., works lb. .3995- .4295
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 —
dms., 1,000-lb lots or more lb. .619 —
dms., smaller lots lb. .639 .65
Copper gluconate, dms lb. 3.20 —
Copper hydrate, dry, dms., c.l., frt. E. of Miss lb. .52½- —
dms., l.c.l., same basis lb. .53 · —
Copper metal, electrolytic, dlvd, Valley, basis lb. .31 · —
Copper naphthenate, liq., 8% Cu, dms, frt alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 · —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .47 · —
red., 97%, USP Type 1, bbls., 100-5,000 lbs. lots lb. .47½- —
90%, USP Type II, bbls., 100-5,000-lb lots or more, works lb. .45¼- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 · —
10% active quinolinolate, dms lb 1.14 1.15
Copper resinate, precip., dms., frt. alld lb. .47 · —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works 100 lbs.12.50 · —
bgs., l.c.l., works 100 lbs.13.00 -15.50
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.23.35 · —
dms., l.c.l., works 100 lbs.24.10 · —
Tribasic, distributors, 50-lb. bgs., c.l., works 100 lbs.28.60 · —
bgs., l.c.l., works 100 lbs.30.10 · —
Copper undecylenate, dms lb 2.75 —
Copra, Atl., Gulf ports, c.i.f. ton.165.00 · —
Pac. ports, c.i.f. ton.160.00 · —
Coriander oil, USP, bots. lb. 6.50 · 7.25
Coriander seed, Moroccan, bgs lb. .18 · —
Rumanian, bgs. lb. .14 · —
Yugoslavian, bgs lb. .08½- —
Corn oil, crude, tanks, works lb. .17¼- —
Foots, (soapstock acid 95%) tanks, New York lb. .07⅛ Nom.
Refd., salad, dms. lb. .23 · .23½
tanks lb. .21 · —
Corn oil acids, dist., dms lb. .15½- .18
tanks lb. .13 · —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 · —
paper bgs., l.c.l. 100 lbs. 7.45 · —
Corn syrup, 43° Be., tanks, dlvd, N.Y. 100 lbs. 6.30 · —
non-ret. dms., c.l., same basis, 100 lbs. 7.23 · —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram .95 · 1.75
Costus oil, bots oz. 6.00 · —
Cottonseed meal, 41%, bgs., Memphis ton.62.00 -65.00
Cottonseed oil, crude, tanks, South, East lb. .14¼- —
tanks, Valley lb. .14½- —
tanks, Texas, Waco lb. .14 · —
Foots (soapstock, acid 95%), New York, tanks lb. .04½ Nom.
Refd., salad, dms. lb. .20½- .20⅝
tanks lb. .18½- —
Cottonseed oil acids, dist., dms lb. .15½- .18
tanks lb. .13 · —
Coumarin, NF, cryst., dms. lb. 3.20 · 3.30
Cramp bark, NF, bls. lb. .90 · 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, chys., lb. 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 · —
Crude, soln. 80%, tanks, works. gal. .226 · —
Refd., dms., c.l., works gal. .50 · —
dms., l.c.l., same basis gal. .62 · —
tanks, same basis gal. .38 · —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 · 1.77
Hardwood, NF, chys., dms., same basis lb. 1.42 1.47
Pinewood, dms., incl. c.l., works. lb. .0611- —
dms. incl., l.c.l., works lb. .0684- —
dms. incl., l.c.l. ex whse, New York lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16¼- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 · —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 · —
non-ret. dms., l.c.l., same basis, lb. .19 · —
tanks, same basis lb. .16 · —
m-Cresol, 95-98% dms., c.l., works, lb. .60 · —
dms., l.c.l., works lb. .61 · —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 · —
dms., l.c.l., same basis lb. .19 · —
tanks, same basis lb. .16 · —
2.97% 2°C, dms., c.l., frt. equald. lb. .22 · —
dms., l.c.l., same basis lb. .23 · —
tanks, same basis lb. .20 · —
o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt. equald lb. .17 · —
ret. dms., l.c.l., same basis lb. .18 · —
tanks, same basis lb. .15 · —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C, m.p., dms., c.l., frt. equald lb. .16 · —
ret. dms., l.c.l., same basis lb. .17 · —
tanks, same basis lb. .14 · —
25°-28°C. m.p., dms. c.l., frt. equald lb. .15 · —
ret. dms., l.c.l., same basis lb. .16 · —
tanks, same basis lb. .13 · —
p-Cresol, 98%, dms., c.l., dlvd lb .52 —
dms., l.c.l., dlvd lb .53 —
tanks, dlvd lb .49 —
2,3-Cresotic acid, dms, ton lots, works lb 70 —
dms., smaller lots, works lb 72 —
p-Cresyl methyl ether, cns lb 1.60 1.65
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and triecresyl phosphate grades dms., c.l., t.l. frt equald gal 1.35 —
dms., l.c.l., same basis gal 1.40 —
tanks, same basis gal 1.15 —
metapara content 25% or less, dms. c.l. t.l. same basis gal 1.20 —
meta-para content 25% or less, dms., l.c.l. same basis gal 1.25 —
tanks, frt. equald gal 1.00 —
Imp., metapara content 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms or more gal. 1.03¼- —
less than 50 dms., same basis gal 1.05 1.15
tanks, same basis gal 1.00 —
Crotonaldehyde, 91-93% dms., l.c.l. works lb. .25 · —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 · —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 · —
bgs., l.c.l., works 100 lbs.14.25 · —

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Celanese ...ICALS

Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 • —
bgs. t.t.l., works lb. .22 • —
Cubeb berries, NF, bgs. lb. 1.30 • —
Powd., cs. lb. 1.45 • —
Cubeb oil, cns lb. 8.75 - 9.00
Cumene dms. c.l., works lb. .12 • —
dms., t.c.l., works lb. .14 • —
tanks works lb. .11 • —
Cumin seed, Iranian, bgs. lb. .19 • —
Moroccan, bgs. lb. .36 • —
Turkish, bgs. lb. .18 • —
Cumin seed oil bots, cns lb. 15.50 -17.00
Cyanamide fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont. contract. ton 57.00 • —
pulv., 21% N, bgs., works. unit-ton. 2.85 • —
Indust. grade, bgs., c.l., works. ton. 75.00 • —
bgs., t.c.l., works ton. 96.00 • —
Indust grade 6-16 mesh, dms., c.l. works ton. 120.00 • —
dms. t.c.l. works ton. 140.00 • —
Cyclohexane 99%, tech. dms., c.l., dlvd. E of Rockies gal 1.02 • —
dms. t.c.l. same basis gal. 1.10 • —
dms. c.l. dlvd W of Rockies gal. .77 • —
dms., t.c.l., same basis gal. .85 • —
tanks, works gal. .55 • —
98% tech 40-dm lots or more, f.o.b works gal. .56 • —
5-39 dms same basis gal. .60 • —
tanks, same basis gal. .36 • —
Cyclohexanol tech., dms. c.l., works, frt. alld. E lb. .30½- —
dms. t.c.l. works, same basis. lb. .31½- —
tanks, works, same basis lb. .28 • —
Cyclohexanone tech. dms., c.l., works lb. .33½- —
dms., t.c.l. works lb. .34½- —
tanks, works lb. 31 • —
Cyclohexylamine, tech., dms., c.l., works lb. .49 • —
dms., t.c.l., works lb. .50 • —
tanks, works lb. .47 • —
Cypress oil bots. lb. 5.30 — —

D

2,4-D tech. bgs. dms. c.l., works, frt equald lb. .40 — —
bgs. dms. t.c.l. same basis lb. .45 — .49
2,4-D butyl ester dms. c.l. works. lb. .43 — —
dms., t.c.l., same basis lb. .48 — .52
tanks, same basis lb. .42 — —
2,4-D isopropyl ester, dms., c.l., works lb. .43 — —
dms., t.c.l., works lb. .48 — .52
tanks, works lb. .42 — —
Dammar gum Batavia, A E. cs lb No stocks.
East India Batu bold. bgs lb. .15½ — .18
nubs and chips, bgs lb. .10 — .11
black, bold, bgs lb. .16 — .18
nubs and chips, bgs. lb. .13 - .14½
unscraped bgs. lb. .13 - .14½
pale, chips, bgs lb. .16 - .18
pale nubs bgs lb. 20¾ — 24
Siam cs lb. 31½- .34
Singapore, No. 1, bgs. lb. .38 - .44
No 2, bgs. lb. .29 — 32
dust, bgs. lb. .18 — 20
No. 3, bgs. lb. No stocks.
Dandelion root, bls lb. .35 — .40
DDD, tech., flake, grd., fib dms., c.l., works lb. .45 — 47
tib dms., t.c.l. works lb 46 — .48
DDT, flake or lump, bgs., c.l., dlvd lb .23 • —
bgs., smaller lots, same basis. lb .25 • —
fib dms. c.l., same basis lb .24 • —
fib dms., smaller lots, same basis lb .26 • —
Powdered DDT 1c per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
I-Decanol, tech. dms. c.l., dlvd E. lb. 43½- —
dms., t.c.l., dlvd. E. lb. 45½- —
tanks, dlvd E lb. 41 — —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .20½- —
dms., t.c.l., dlvd. lb. .22 - —
tanks, dlvd. lb. .18 - —
Perfume grade, bots. lb 1.00 — 2.00
Decyl alcohol normal (see I-Decanol)
Deertongue leaves, bls. lb. .50 — .60
Defluorinated phosphate, feed grade 14% P paper bgs. c.l., t.l., Tupelo, Miss ton. 52.00 — —
18% P, paper bgs., c.l., Plant City, Fla ton. 61.25 • —
paper bags, c.l., works, Miss ton. 66.00 • —
19% P, paper bgs., c.l., t.l. works, Houston, Tex ton. 66.35 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common (15-17% free fatty acid), 400-lb dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb dms lb. 13 • —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l. dlvd E of Rockies, gal. 69½- —
dms., t.c.l., same basis gal. 74½ .80½
tanks, dlvd. same basis gal 53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd E of Rockies gal. .72 — —
dms., t.c.l., same basis gal .77 — .83
tanks, same basis gal 56 — —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies gal. 70½- —
dms. t.c.l. same basis gal. 75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms. c.l. dlvd. E of Rockies gal. .69 — —
dms., t.c.l., same basis gal. .74 — .80
tanks, same basis gal. .53 — —
SD3A, dms. c.l., dlvd. E. of Rockies gal. .68 — —
dms. t.c.l same basis gal. .73 — .79
tanks, same basis gal. .52 — —
SD23A, dms., c.l., dlvd. E. of Rockies gal. 70½ — —
dms., t.c.l., same basis gal. 75½ — .81½
tanks same basis gal .54½- — —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 — —
dms., t.c.l. same basis gal. .76 — .83
tanks same basis gal. .55 — —
SD29, dms., c.l., dlvd. E. of Rockies gal. .69½- — —
dms., t.c.l., same basis gal. 74½ — .80½
tanks, same basis gal. .53½- — —
SD30, dms., c.l. dlvd. E. of Rockies gal. .68 — —
dms., t.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —

Denatured alcohol, SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., t.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD-40, dms., dlvd. E. of Rockies, gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.60 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 • —
paper bgs., t.c.l. 100 lbs. 9.54 • —
canary dark, paper bgs., c.l. 100 lbs. 9.23 • —
paper bgs., t.c.l 100 lbs. 9.38 • —
Indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 • —
paper bgs., t.c.l 100 lbs. 9.28 • —
white paper bgs., c.l. 100 lbs. 8.97 - —
paper bgs., t.c.l 100 lbs. 9.12 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose anhyd., comL, bgs., c.l. 100 lbs 8.65 - —
bgs. t.c.l. 100 lbs 8.80 • —
Anhyd. special, aluminum foil lined fib dms., 200-lb dms 100 lbs. 14.70 • —
100-lb dms. 100 lbs. 15.20 • —
Hydrated, coml. bgs., c.l., ex whse 100 lbs 7.45 - —
bgs. c.l., ex whse 100 lbs. 7.60 - —
USP dms. lb. 19¾- —
Diacetone alcohol, acetone-free, dms. c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Tech. dms. c.l. dlvd. lb. .15 - —
dms. t.c.l. dlvd lb. .16½- —
tanks dlvd lb 12½- —
Diacetyl, flavor grade, bots lb 3.30 4.30
Di-sec-amyl phenol, dms., c.l., works lb .32 • —
dms., t.c.l., works lb. .33 • —
tanks works lb 29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., t.c.l., works lb 33 - —
tanks works lb. 29½- —
Diallylamine dms., c.l., dlvd. lb 98½- —
dms. t.c.l., dlvd. lb 1.00 - —
tanks dlvd lb .96 - —
o-Dianisidine dry, tech., fib dms. lb 2.00 • —
Dibenzyl sebacate dms., c.l., works lb 93 • —
dms., t.c.l., same basis lb 94 • —
tanks same basis lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb .55 • —
2,6-Di-tert-butyl-p-cresol, teed grade, c.l., t.l., dms., dlvd lb. 65 • —
t.t.l., dms., same basis lb 68 • —
Food grade c.l. t.l. dms., dlvd. lb 65 — —
dms. t.t.l. same basis lb 68 - 1.10
Tech., dms., c.l., t.l., dlvd. lb .57 - —
dms., t.c.l., same basis lb 60 - —
tanks, same basis lb .54 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd E lb .31½- —
dms., t.c.l., t.t.l., dlvd. E lb 33 - —
tanks, dlvd E lb .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb .31½- —
dms., t.c.l., t.t.l., dlvd E lb 33 - —
tanks, dlvd E lb 29 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., t.c.l., same basis lb. .33 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .29 • —
tanktrucks, 1,000-1,999 gals., same basis lb .29 • —
Dibutyl sebacate, dms., c.l., works. lb 67½- —
dms., t.c.l., works lb. 68½- —
tanks, works lb. 65½- —
Dibutyl tartrate, dms., works, frt. alld lb 65½- —
Dibutylamine, dms., c.l., dlvd lb 55½- —
dms., t.c.l., same basis lb 57 - —
tanks, same basis lb 53 - —
Dicaprylphthalate, dms., c.l., dlvd lb. 28½- —
dms., t.c.l., dlvd. lb. .30 - —
tanks, dlvd. lb. .26 - —
Dicapryl sebacate, dms., c.l., works. lb 63 - —
dms., t.c.l., works lb. 63½- .64
tanks, works lb. 61 - —
2,5-Dichloroaniline, dms., works lb. 83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt alld lb. 73 - —
o-Dichlorobenzene, dms., c.l., trt. alld. E lb. 12¾- —
dms., t.c.l., same basis lb 13¾- —
tanks, same basis lb .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld E lb. .12 - —
dms. 2,000 lbs or more, same basis lb. 14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. 33½- —
dms., t.c.l., or t.t.l., works lb .34 - —
tanks, works lb 32 - —
Dichlorodiphenyltrichloroethane (see DDT).
4,2-Dichloroethyl ether, dms., c.l., t.l., dlvd E lb. 15½- —
dms., t.c.l., t.t.l., same basis lb. .17 - —
tanks same basis lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l. frt. equald lb. .65 - —
dms. t.c.l. same basis lb 75 - —
Dichloropentanes dist., dms., c.l., works lb. .05 • —
dms., t.c.l., works lb. .06 • —
tanks works lb .03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms. c.l., works lb. .54 • —
dms., t.c.l., works lb. .55 • —
tanks works lb. .52 • —
Dicyclohexyl phthalate, gran., fib. dms c.l. works frt alld. lb. .49½- —
fib. dms., t.c.l., same basis lb. .51½- —
Dicyclopentadiene dms. c.l., t.o.b. works lb. .14½- —
dms., t.c.l., same basis lb. .14¾- —
tanks same basis lb. .13 - —
Didecyl phthalate dms. c.l., works. lb. .27½- —
dms., t.c.l., same basis lb. .29 - —
tankcars, tanktrucks, 2,000 gals. lb. .25 • —
tanktrucks 1,000-1,999 gals, same basis lb 26½- —
Dieldrin, dms., c.l. dlvd. lb 1.85 • —
dms., t.c.l. dlvd. lb. 1.90 • —

Diethanolamine, dms., c.l., dlvd. E. lb. .27 • —
dms., t.c.l., same basis lb. 28½- —
tanks, same basis lb. 24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., t.t.l. frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., t.o.b. works lb. .47½- —
dms., t.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., t.c.l., dlvd. lb. .71 - —
tanks, dlvd lb. .67 - —
Diethyl oxalate, dms., c.l., t.o.b. works lb. .42½- —
dms., t.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .29¾- —
dms., t.c.l., dlvd. lb. .31¼- —
tanktrucks, 1,000-1,999 gals, same basis lb. .27¾- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .27¼- —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 - —
dms., t.c.l., frt. alld. E lb. .22½- —
tanks, frt. alld. E lb. .18½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 - —
dms., t.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer dms. c.l. t.l., works. lb 2.30 • —
5-44 dm. lots, works lb 2.35 • —
1-4 dm lots, works lb 2.40 • —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
Diethylamine, dms., c.l., dlvd E lb. .52 - —
dms., t.c.l., same basis lb. .53½- —
tanks, same basis lb. 49½- —
N,N-Diethylaniline dms., c.l., frt. alld lb. .57 - —
dms., t.c.l., same basis lb. .58 - —
tanks, same basis lb. 55 - —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. 17½- —
f.o.b. Zone 2 lb. .18½- —
380-lb. dms., t.c.l., c.l., f.o.b. Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —
tankcars, Zone 1 lb. .15 - —
Zone 2 lb. 16 — —
Zone 1 is East of the Rockies, Zone 2, West of the Rockies
Di-2-ethylhexyl adipate (see Di-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-octyl phthalate).
phthalate).
Diethylene glycol dms. c.l. dlvd E. lb. .17¾- —
dms., t.c.l., same basis lb. .19¼- —
tanks same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .55¾- —
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾- —
dms., t.c.l., frt. alld. E lb. .32¼- —
tanks, frt. alld E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., t.c.l., works lb. .31½- —
tanks, works lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .22½- —
dms., t.c.l., dlvd. E lb. .24 - —
tanks dlvd E lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., t.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22½- —
tanks, dlvd E lb. .18½- —
Diethylenetriamine dms., c.l. dlvd. E lb. .44 - —
dms., t.c.l., dlvd E. lb. .45½- —
tanks, dlvd E. lb. 41½- —
Diethystilbesterol USP, bots. 10-kilo lots kilo. 100.00 147.50
bots. 1-kilo lot kilo 110.00 152.50
Digitalis leaves USP dom. dms lb 1.25 — —
Digitoxin, USP, bots gram 3.75 — 4.20
Diglycol laurate, dms., ton lots lb. .32½- —
Diglycol stearate, dms., t.l lb. .26 - —
Diglycolic acid, bgs. c.l. t.l., works. lb. .15½- —
bgs. t.c.l. works lb. .16 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., t.c.l., works lb. 67 - —
tanks works lb. 64 - —
Dihydrazine sulfate, dms., works lb. 1.10 — 1.25
Dihydrostreptomycin sulfate, bulk. gram. .03 - —
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 • —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 • —
Tech., dms., 20,000 lbs or more lb 1.11 • —
dms. 1,050 lbs to 20,000 lbs. lb 1.13 • —
dms. 150 lbs to 1,050 lbs lb. 1.15 • —
Di-isobutyl ketone dms., c.l., dlvd. lb. .17 - —
tanks dlvd lb. .18½- —
Di-isobutyl phthalate, dms., c.l., dlvd E. lb. .31½- —
dms. t.c.l., same basis lb. .32½- —
tanks, same basis lb. 29 - —
Di-isobutylene dms. c.l., dlvd. E lb. .10 - —
dms. t.c.l., dlvd. E lb. .11½- —
tanks dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., works lb. .29 - —
dms., t.c.l., same basis lb. .30½- —
tanktrucks, 1,000-1,999 gals., works lb. .27 - —
tankcars, tanktrucks, 2,000 gals., works lb. .26½- —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., t.c.l., works lb. .61¼- —
tanks works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., t.c.l., same basis lb. .24¾- —
tanks, same basis lb. 20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., t.c.l., same basis lb. .52 - —
tanks, same basis lb. 48 - —
Dillweed oil, dom., bots., dms lb. 5.25 • —
Dimethyl anthranilate, cns. lb 4.15 • —
Dimethyl dichlorovinyl phosphate, 55-gal dms., dlvd lb 3.50 • —
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E lb. .78 - —
dms., t.c.l., dlvd. E lb. .79½- —
tanks, dlvd. E lb. .75½- —
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines lb. .78 - —
dms., t.c.l., dlvd., 100% basis. lb. .79½- —
tanks, dlvd., 100% basis lb. .75½- —
Dimethyl hydroquinone, dms. lb. 1.90 — 2.20
Dimethyl phthalate, dms., c.l., works lb. .29¾- —
dms., t.c.l., works lb. .31¼- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27¾- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27¼- —

Dimethyl sebacate, dms., c.l., works. lb. 1.31 • —
dms., t.c.l., works lb. 1.30 • —
tanks, works lb. 1.28 • —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., t.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .17½- —
dms., t.c.l., works lb. .18½- .19¼
tanks, works lb. .15 • —
Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 • —
dms., t.c.l., same basis lb. .37 • .38
tanks, same basis lb. .33 • —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 • —
dms., t.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 • —
40% soln., dms., c.l., frt. equald., 100% basis lb. .35 • —
dms., t.c.l., frt. equald, 100% basis lb. .35½- —
lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 • —
dms., t.c.l., same basis lb. .29 • —
tanks, same basis lb. .26 • —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., t.c.l., works lb. .33 - .34
tanks, works lb. .30 • —
2,4-Dinitroaniline, dms., frt. alld lb. .75 • —
Dinitroaniline orange toner, CP, bbls., dlvd E. of Rockies. lb. 1.61 • —
Dinitroaniline orange toner prices 1c. higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 — —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms., c.l., frt. alld. E lb. .17¼- —
dms., t.c.l. frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd. 63°C. dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .38½- —
dms., t.c.l., works lb. .39½- —
tanks, works lb. .36 - —
Dioctyl phthalate, dms. c.l., frt. alld. E lb. .27 • —
dms., t.c.l., frt. alld. E lb. .29½- —
tanktrucks, 1,000-1,999 gals., same basis lb. .25 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .24½- —
Dioctyl phthalate prices ¾c. higher in West.
Dioctyl sebacate, dms., c.l., works, lb. .61¼- —
dms., t.c.l., works lb. .62¼- —
dms., t.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½- —
dms., t.c.l., frt. alld. E lb. .33 - —
tanks, frt. alld. E lb. .29 - —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs. c.l. t.l., dlvd. E lb. .34 • —
bgs., t.c.l., t.t.l., dlvd. E lb. .35 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., t.c.l., works lb. .62 • —
dms., t.c.l. ex whse. gal. .78 • —
tankscars, works gal. .41 • —
Steam dist. dms. c.l., works, South gal. .72 • —
dms., t.c.l., dlvd. New York gal. .91 • —
tanks, works, South lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid 1,000-lb or more, bgs., works lb. .75 • —
Diphenolic polyether acids, 1,000-lb. or more bgs., works lb. 1.00 • —
Diphenyl, bgs. c.l. t.l., works lb. .16¾- —
bgs., t.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide perfume grade, cns. lb. .55 • .70
Diphenyl phthalate dms., c.l., works. lb. .52 • —
dms., t.c.l., works lb. .54 • —
Diphenylamine, retd. flake, bgs., c.l., works frt. equald lb. .32 — —
bgs., t.c.l., same basis lb. .34 — —
Refd., fused tanks, same basis lb. .29 • —
Refd., diphenylamine in dms., ½c per lb higher
Diphenylguanadine, bgs., dms., ton lots, frt. alld lb. .51 • —
bgs., smaller lots, frt. alld lb. .52 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 - —
dms. t.c.l. frt. alld. lb. .18½- —
tanks frt alld lb .14¼- —
Dipropylene glycol prices 1c. higher in West.
Dipropylene glycol methyl ether, dms. c.l., dlvd. E lb. .20 - —
dms., t.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 • —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .71 • —
dms., smaller lots, frt. alld lb. .72 • —
Di-o-tolylthiourea, tech. solid, dms., c.l. t.l. frt alld lb. .55 • —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 • —
dms., t.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
50-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., t.c.l., works, 100% basis. lb. 1.05 • —
tanks, same basis lb. .90 • —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd, E lb. .50 • —
dms, t.c.l., t.t.l., same basis lb. .52 • —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald lb. .134 • —
dms., t.c.l. same basis lb 144 • —
tanks, same basis lb. .11 • —
Dodecylphenol c.l., frt. alld. lb. .22¼- —
dms., t.c.l., same basis lb. .23¼- —
tanks, same basis lb. .20 • —
Dodecylphenol prices on shipments to Western States are 2c per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No 3 lb. 31.30 -35.90
Red, FD&C, No. 2 lb. 3.30 4.10
No. 3 lb. 19.60 -22.85
No 4 lb 5.55 7.50
Dyes, coaltar, certified colors for drugs and cosmetics 500-lb and 1-lb. lots. dlvd:
Yellow, FD&C, No. 5 lb. 3.30 4.10
No 6 lb 3.30 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No 6 lb. 15.65 -16.10
No 7 lb. 14.35 -14.80
Orange, D&C, No. 3 lb. 10.50 10.95
No. 4 lb. 19.60 -20.05
No. 5 lb. 3.80 4.25

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	23.60	-24.00
No. 19	lb.	15.00	-15.45
No. 21	lb	3.90	4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No 11	lb.	13.05	-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65	-16.10
Green, Ext. D&C. No 1	lb.	15.65	-16.10
Red, Ext., D&C, No. 1	lb.	13.05	-13.50
Yellow, Ext. D&C. No. 1	lb	10 50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd No.

11110	Brilliant scarlet BN	lb	1.79	—
13390	Fast blue SR	lb.	1.57	—
14025	Yellow 2G	lb	1.26	—
14030	Orange R, extra, conc.	lb	1.64	—
14645	Chrome black T	lb.	77	—
14720	Rubine XX, conc	lb.	1.76	—
15510	Orange Y, extra conc.	lb.	83	—
15575	Orange RR	lb.	99	—
15620	Fast Red A, conc.	lb.	1.77	—
15705	Chrome blue black R, conc.	lb.	1.12	—
16150	Scarlet 2RL	lb	1.22	—
16255	Brilliant scarlet 3RN, conc.	lb	1.26	—
16230	Fast light, orange 2G	lb.	1.39	—
17590	Brown PG	lb	3.00	—
18050	Phloxine 2G	lb.	1.16	—
18055	Fuchsine 6B	lb.	1.55	—
18965	Fast yellow 2G	lb.	2.32	—

Dyes, coaltar for general use in cloth dyeing numbers are those of the Color Index scale or prototype), contract dlvd. No.

19140	Yellow XX	lb.	2.48	—
19555	Yellow NN, conc.	lb.	3.67	—
20170	Brown Y	lb.	1.33	—
20470	Blue black, extra, conc.	lb.	1.44	—
21010	Brown, RX, conc	lb.	1.42	—
22240	Scarlet B	lb.	2.81	—
22310	Red FC	lb.	1.57	—
22311	Brown MCW	lb.	1.59	—
22610	Blue 2B, extra conc	lb.	1.51	—
23500	Red 4BX, conc.	lb	1.80	—
24410	Sky blue FF extra, conc.	lb.	1.95	—
24895	Brilliant yellow, conc.	lb.	3.27	—
26360	Navy blue 3R, conc.	lb.	1.84	—
26695	Black F, conc.	lb.	2.30	—
26900	Milling Red 3R, conc	lb.	2.24	—
27075	Neutral black 2B, conc.	lb.	2.75	—
27720	Gray L	lb.	2.18	—
29185	Fast scarlet 4BNC	lb	2.23	—
30015	Diazo black VJ conc.	lb.	2.48	—
30045	Yellow brown K, extra	lb.	1.45	—
30235	Black EB, 200%	lb.	1.33	—
30295	Green BY conc.	lb	1.07	—
35660	Brown B	lb.	2.89	—
37565	Naphthol SWF	lb	1.85	—
40000	Yellow 3G	lb.	1.44	—
41000	Yellow OX	lb.	2.45	—
42000	Green V crystals	lb.	2.73	—
42040	Brilliant green G crystals	lb.	3.62	—
42090	Blue EG	lb.	1.85	—
42100	Milling green 6B, conc.	lb	4.78	—
42640	Violet 4BXN	lb	2.43	—
43830	Brilliant blue, BBG	lb.	2.44	—
44045	Blue B, extra conc.	lb.	3.61	—
45170	Red BX	lb.	4.76	—
50415	Nigrosine SSJ	lb.	1.03	—
52015	Blue GXX	lb.	2.54	—
58005	Alizarin red SC	lb.	3.64	—
59700	Golden orange GFD, single paste	lb.	2.70	—
59710	Flaming orange 6RD double powder	lb.	4.90	—

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale of prototype), contract, dlvd. No.

59800	Dark blue BO, single paste.	lb.	2.28	—
59825	Jade green NG supra, double paste	lb.	1.75	—
61570	Alizarin green CG extra	lb.	3.81	—
63010	Alizarin blue SAPG	lb	3.90	—
63615	Alizarin blue black B	lb	3.26	—
69825	Blue BLFD double paste	lb.	2.76	—
70800	Brown BR single paste	lb	2.03	—

Dyes, coaltar, oil-soluble, 100-lb drums, dlvd. No.

12140	Oil scarlet BL	lb.	1.87	—
12055	Oil orange 7078 V	lb.	1.38	—
26120	Oil red N 1700	lb.	1.94	—
42535D	Methyl violet base	lb.	1.88	—
44045B	Victoria blue base	lb.	4.06	—
50415B	Oil black 8603	lb.	.80	—
61565	Alizarin cyanine green base.	lb.	6.13	—

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB

	lb.	3.89	—
Spirit brown GN	lb.	5.30	—
Spirit orange R conc.	lb.	5.87	—
Spirit red B conc.	lb.	6.41	—
Pr. 517 Spirit yellow 2R conc	lb	4.62	—
Pr. 554 Spirit blue THN	lb.	5.06	—

E

Echinacea root, bls.	lb.	1.25	—
Elm bark, grinding, bls.	lb	.30	.33
Powd., bbls., bxs	lb.	.60	—
Select, bundles	lb.	.75	—

Emetine hydrochloride, USP, bots	oz.	48.40	—
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd.	lb.	2.77	—
Eosin red toner, bbls., works	lb.	1.95	—
Ephedrine, syn., USP, anhyd., bots. 100-oz.lots	oz.	.98	- 1.00
hydrous, bots., 100-oz. lots.	oz.	.92	—
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works	oz.	.75	—
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works	oz.	.73	—
USP, powd., dms., 100-oz., same basis	oz.	.73	—
Epichlorohydrin, dms., c.l., dlvd	lb.	.29½	—
dms., l.c.l., dlvd.	lb.	.31	—
tanks, dlvd.	lb.	.27	—
Epinephrine base, syn., USP, bots., 100 gram lots	gram.	.58	—
Epsom salt (see Magnesium sulfate).			
Erigeron oil, cns.	lb.	11.00	—
Ergot, NF, dms., tin-lined	lb.	2.00	- 2.50
Eserine salicylate, bots.	oz.	34.50	-40.00
Eserine sulfate, bots.	oz.	26.00	—
Ester gum, gum-rosin type, dms. c.l. dlvd. Ill., Md. Ky. E. States, Minneapolis, N C., Ohio St Louis, St Paul. Va., W Va	lb	18½	—
Wood-rosin type, dms. c.l., same basis	lb	18½	—

Ether (see specific product).

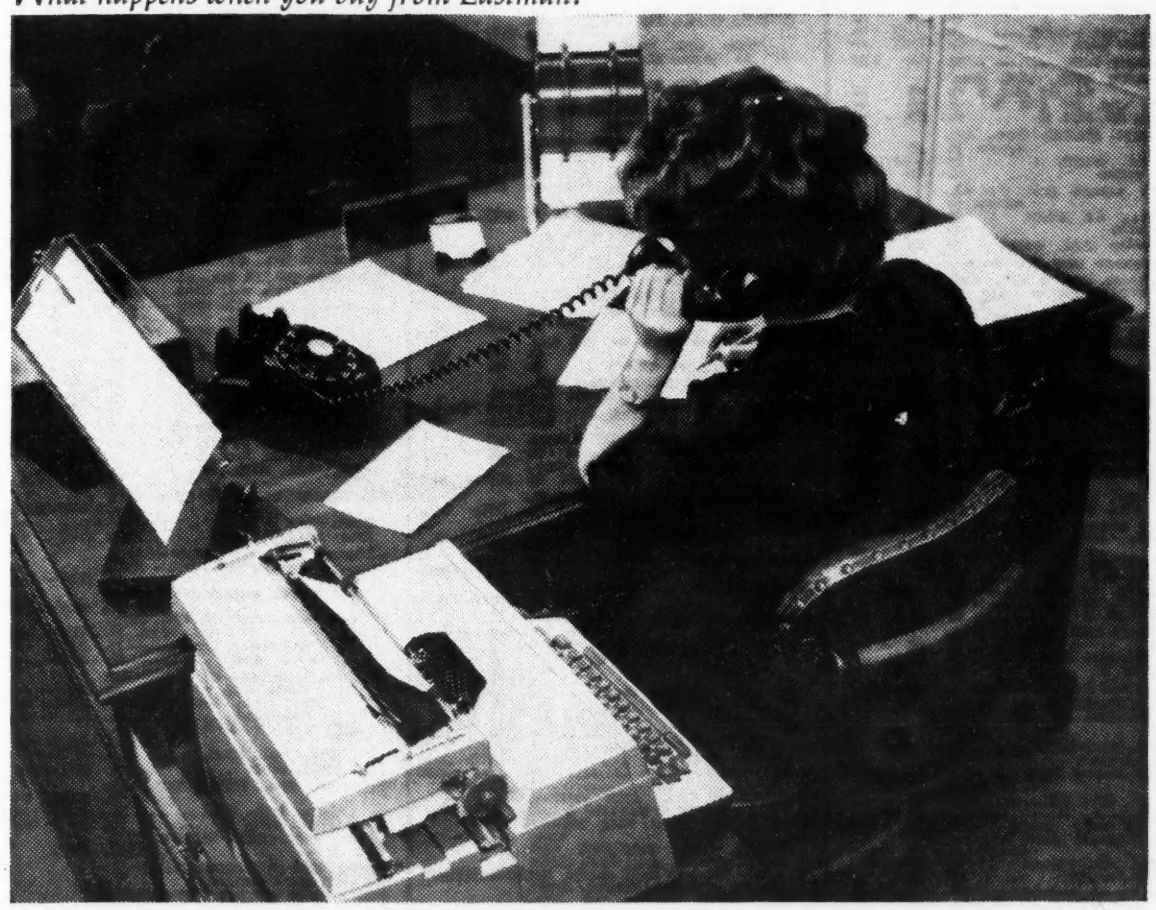
An extra measure of service—
always—
when you buy from Eastman

Eastman Plasticizers

dibutyl sebacate
dimethyl phthalate
diethyl phthalate
di-(methoxyethyl) phthalate
di-isobutyl phthalate
dibutyl phthalate
dioctyl phthalate (DOP)
dioctyl isophthalate (DOIP)
dioctyl adipate (DOA)
dioctyl azelate (DOZ)
plasticizer 84
—an octyl butyl phthalate
polymeric plasticizer NP-10
triacetin
tributyrin

For properties and shipping information on these and other Eastman products, **see Chemical Materials Catalog, page 363, or Chemical Week Buyers' Guide, page 107.**

What happens when you buy from Eastman!



"I suggested that the customer had ordered more plasticizer than he needed"

...writes our New England office's girl Friday. "But what else can you do when three days after shipping 4,000 gallons of DOP you receive from him a second purchase order for immediate shipment of another 4,000 gallons of DOP, especially when you know from past service to this customer that the second order is out of line with his purchase pattern—relax and enjoy the increased business, or stick your intuitive nose into his business?

"Well, first I went over his order form again to be absolutely certain that it was correctly entered, then throwing the old maxim that *the customer is always right* to the wind, I got his purchasing agent on the phone.

"Now, who ever says purchasing agents, by and large, can be a stern lot, hasn't talked to this one. Turned out it was an error—a double-up order for which he had neither immediate use nor storage capacity. Upon his advice I post-dated the order three weeks and thanked him for his very kind words about our service.

"Is this an example of the kind of service we talk about in our ads?"

It sure is! For the best service is made up of close attention to the customer's needs, whether they are large or small, and this, of course, includes anticipating the material he requires as well as the material he does not require.

Eastman CHEMICAL PRODUCTS, INC. KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis.
Western Sales Representative: Wilson & Geo. Meyer & Company, San Francisco; Los Angeles; Salt Lake City; Seattle.

Ethyl acetate, nat., ferment, 85-88%, dms., c.l. dlvd lb .15 - —
dms., l.c.l., dlvd lb .16¼ - —
tanks dlvd lb .12½ - —
85-88% dms. c.l., dlvd. lb .15¼ - —
dms., l.c.l., dlvd lb 16¾ —
tanks dlvd lb 12¾ —
99%, dms., c.l., dlvd..... lb. .15½ - —
dms. l.c.l., dlvd lb 17 —
tanks, dlvd lb 13 —
syn., 85-88%, dms., c.l., dlvd.. lb. .15 - —
dms. l.c.l., dlvd lb 16½ —
tanks dlvd lb 12½ —
85-98%, dms., c.l., dlvd... lb. .15¼ - —
dms. l.c.l., dlvd lb 16¾ —
tanks dlvd lb 12¾ —
99%, dms., c.l., dlvd. ..... lb. .15½ - —
dms. l.c.l., dlvd lb 17 —
tanks dlvd lb 13 —

Ethyl acetoacetate, dms., c.l., dlvd. lb 58½ - —
dms. l.c.l., dlvd. ..... lb 60 —
tanks, dlvd. ..... lb .56 - —

Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .34¾ - —
dms., l.c.l., dlvd ..... lb. .35¾ - —
tanks, dlvd. ..... lb. .32¼ - —

Ethyl alcohol, 190 pf. USP, tax paid dms. c.l., dlvd E of Rockies gal 20.63 —
dms. l.c.l. same basis gal. 20 73 -20.84
USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. 78 .89
tanks, same basis gal 52 —

Ethyl alcohol, absolute 200 pf., tax paid. dms. dlvd E of Rockies gal 21 75 —
dms., l.c.l., same basis gal. 21.85 -21.96
tanks, same basis gal 21 59 —

Ethyl alcohol, denatured (see Denatured alcohol, ethyl).

Ethyl aminobenzoate USP (see Benzocaine).

Ethyl amyl ketone dms. c.l., dlvd. lb .20 —
dms. l.c.l. same basis .... lb 21½ —
tanks, same basis ..... lb 17½ —

Ethyl benzoate bcts. ..... lb 75 1.00

Ethyl bromide tech., 98%, dms., c.l., frt. alld. E lb 43 —
dms. l.c.l. frt alld E lb 45 —
tanks, frt. alld. E lb .40 - —

2-Ethyl butyl alcohol, dms., c.l., works lb 30 —
dms., l.c.l., works lb 30¾ —
tanks, works ..... lb 28 - —

Ethyl butyl ketone, dms., c.l., t.l., works lb .36 - —
dms l.c.l., t.l. works lb 36¾ - —
tanks works lb 34 - —

Ethyl butyrate dms., works lb. .85 1.00

Ethyl carbamate (see Urethane)

Ethyl cellulose, vis. 4 cps., bgs., 5,000 lb lots or more, frt. alld E lb. 73 - —
bgs smaller lots frt alld E lb. 75 - —
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots frt alld E. lb 70 —

Ethyl chloride tech., cyls., works. lb 20 22
dms. works lb 18 20
tanks works lb 10 —

Ethyl cinnamate, cns ..... lb. 3.35 3.50

Ethyl ethanolamines, mixed, dms., c.l., dlvd E lb 43½ —
dms., l.c.l. dlvd E lb 44½ —
tanks dlvd E lb 41½ —

Ethyl ether, absolute ACS dms lb 27 —
Anesthesia USP dealers, 1-lb cns lb 1.01 - —
½ lb cns lb 1.09 - —
¼-lb cns. lb 1.21 - —
Indust. dms. c.l. dlvd. lb .13½ - —
dms., l.c.l., dlvd E ..... lb. .15 - —
tanks dlvd E. ..... lb .11 - —

2-Ethyl hexoic acid dms., c.l., t.l., dlvd. E lb .37 —
dms. l.c.l., t.l. dlvd. E lb. .38½ - —
tanks dlvd E. lb 34½ —

2-Ethyl hexoic acid 1c. higher W. of Rockies.

2-Ethylhexyl acrylate, dms., c.l. t.l., straight or mixed frt. alld. E lb. .39½ - —
dms., l.c.l., same basis ..... lb. .40½ - —
tanks, same basis ..... lb. .37 - —

2-Ethylhexyl alcohol, dms., c.l., dlvd. E lb. .20½ - —
dms., l.c.l., dlvd. E..... lb. .22 - —
tanks, dlvd. E ..... lb. .18 - —

Ethyl iodide chys. works lb 3.30 - —

Ethyl methacrylate dms. c.l., frt equald lb 52 —
dms., l.c.l. frt. equald lb 52½ - —
tanks, frt. equald lb 50 - —

Ethyl morphine hydrochloride, USP. bots oz 11.85 —

Ethyl oenanthate dms lb 1.05 1.30

Ethyl oxalate (see Diethyl oxalate)

Ethyl silicate dist. (see Tetraethyl orthosilicate).

Ethyl silicate 40% available SiO_2 dms., c.l., dlvd. E lb. .49 - —
dms., l.c.l., dlvd. E..... lb. .50½ - —
tanks, dlvd. E ..... lb. .47 - —

N-Ethyl-α-naphthylamine, dms. works. lb 1.04 - —

N-Ethyl-m-toluidine, tech., liq., tanks frt. alld lb 83 - —

N-Ethyl-o-toluidine, bbls lb. .88 - —

Ethylene oxide (see Mono-, Di- or Tri-)

N-Ethyl morpholine, dms. c.l., frt. alld. lb .57 - —
dms. l.c.l., frt. alld ..... lb .58 - —
tanks, frt. alld lb .55 - —

Ethylbenzene 99% dms., c.l., t.l., frt. equald lb. .14 - —
dms., l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .11½ - —

Ethylene, contract refy. gate lb .047⅝ .052⅝

Ethylene dibromide dms., c.l., frt. equald lb .30½ - —
dms. l.c.l. frt. equald lb .31½ - —
tanks frt equald lb .28½ - —

Ethylene dichloride dms. c.l. dlvd. lb .11½ - —
dms., l.c.l., same basis .. lb .13 - —
tanks, same basis lb .09 - —

Ethylene dichloride prices W. of Rockies, 1c per lb higher

Ethylene glycol, indust. dms., c.l., dlvd E lb. .16 - —
dms., l.c.l., same basis lb .17½ - —
tanks, same basis lb .13½ - —

Ethylene glycol monobutyl ether, dms. c.l., dlvd E lb 22 —
dms. l.c.l., dlvd E lb 23½ - —
tanks, dlvd E lb 19½ - —

Ethylene glycol monoethyl ether, dms. c.l. dlvd E lb 21 —
dms., l.c.l., dlvd E lb. 22½ - —
tanks, dlvd E lb. 18½ - —

Ethylene glycol monoethyl ether acetate, dms., c.l. dlvd. E lb. .19½ - —
dms., l.c.l., dlvd. E ..... lb. .21 - —
tanks, dlvd E lb .17 - —

Ethylene glycol monomethyl ether, dms. c.l., dlvd E lb. .21 - —
dms., l.c.l., dlvd E lb. .22½ - —
tanks, dlvd. E lb. .18½ - —

Ethylene glycol monomethyl ether acetate, dms. c.l., dlvd. E lb. .23 - —
dms., l.c.l., dlvd. E lb. .24 - —
tanks, dlvd. E lb. .20 - —

Ethylene glycol monophenyl ether, dms. c.l., dlvd. E lb. .40 - —
dms., l.c.l., dlvd. E lb. .42 - —
tanks, dlvd. E lb. .38 - —

Ethylene glycol monostearate, flake, 150-lb. ctn lb. .33 - —

Ethylene oxide, dms., c.l., dlvd E. lb .21½ - —
dms., l.c.l., dlvd. E ..... lb. .24½ - —
tanks, dlvd E..... lb. .15½ - —

Ethylene trichloride (see Trichloroethylene)

Ethylenediamine 85-88%, dms., c.l., dlvd E., 100% basis lb. .42 - —
dms. l.c.l. dlvd E. 100% basis. lb. .43 - —
tanks, dlvd E., 100% basis lb. .40 - —

Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. ..... lb. 7.40 - —

Eucalyptol, USP, cns., dms lb. .85 1.40

Eucalyptus oil, NF rectified, 70-75% dms lb. .45 —
NF, rectified, 80-85% dms. lb .53 .62

Eugenol, tech., dms ..... lb. 0.00 - —
USP, dms. ..... lb. 1.90 - —

Euphorbia herb, bls ..... lb. .12 - .15

F

F salt paste, tech., dms., works lb. 2.50 - —

Fennel oil, sweet, USP, cns. .... lb. 2.60 - —

Fennel seed, Argentine, bgs lb .16 —
French, light, bgs ..... lb. .16 —
Indian, light, bgs ..... lb. .17½ - —
Rumanian, bgs ..... lb. .14 - —
Yugoslav light bgs ..... lb. .16½ - —

Fenugreek seed, Moroccan, bgs lb. .09 - —

Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., l.c.l., works 100 lbs. 9.00 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls. l.c.l. works 100 lbs 5 75 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs 4.00 —
USP cryst. dms. t.l. works lb .08½ - —

Ferric citrate, gran., dms. lb. .86 - —

Ferric hypophosphite, NF. 175-lb. dm lb. 4.25 - —

Ferric naphthenate liq., 6% Fe, dms. frt alld lb. .28¼ - —

Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. 1.30 - —

Ferric oxides (see iron oxides).

Ferric phosphate NF, soluble, gran pearls, cs lb. .72 .75

Ferric pyrophosphate, NF VII soluble, gran. pearls, 225-lb. dm. lb. 79 - —

Ferric resinate, dms., ton lots, frt. alld lb. .45 - —

Ferric stearate, dms. c.l. frt. alld. lb. .39 - —
dms., l.c.l., frt. alld lb .40 .44

Ferric sulfate, partly hydrated, bgs. c.l., works ton. 35.25 —
bgs., l.c.l., works ton. 36.25 -42.25
bulk, c.l., works ton. 33.25 —

Ferric-ammonium citrate, NF, brown, gran., 100-lb. dms lb. .68 - —
NF, green, gran., 100-lb. dms., frt. equald lb. .68 - —

Ferric-ammonium oxalate, fine gran., dms lb. .27½ - .29½

Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works lb. .32½ - —

Ferric-sodium oxalate, fine gran., dms lb. .27½ - .29½

Ferrous gluconate, USP, 200-lb. dm., frt equald lb. .96 - —

Ferrous sulfate, gran. bgs., c.l., works ton. 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area 100 lbs ton. 3.35 4.25
bbls., c.l., works ton. 40.00 —
bulk, c.l., works ton. 27.00 —
USP cryst., bbls., dms ..... lb 09½ - .10

Fir balsam, Canada, bbls ..... gal. 34.00 - 35.00
Oregon, bbls ..... gal. 3.40 4.64

Fir oil, Canada, cns ..... lb. 1.70 1.75

Fish oil, refd., alkali, dms..... lb. .1380 - .1430
Kettle-bodied, dms. ..... lb. .1530 - .1580
Light-pressed, dms. ..... lb. .1280 - .1330
tanks ..... lb. .1080 - —

Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —

Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 108.00 -110.00

Fishscrap, dom., menhaden, dried, 60% protein, grd. bgs., Atlantic and Gulf coasts. ton. 102.00 -106.00

Fleaseed (see Psyllium seed)

Folic acid, USP, nots, fib dms., kilo lots or more gram. .25 - —
10% feed grade fib dms. 3 kilos or more kilo 30.00 44.00

Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms. c.l. dlvd lb. .0695 - —
tanks, dlvd. ..... lb. .0405 - —

Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375 - —

Formic acid, 85% chys. c.l., works. lb. .1570 - —
cbys., l.c.l., works ..... lb. .1620 - .1720
90%, cbys., c.l., works ..... lb. .1625 - —
cbys., l.c.l., works ..... lb. .1675 - .1775

Fringetree bark, bls lb. .65 .70

Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb. .23¼ - —
dms., l.c.l., frt equald lb. .24¾ - —

Fumaric acid in bags ½c. per lb less.

Furfural, dms. c.l. works lb. .13 - —
dms., l.c.l., works ..... lb. .14 - —
tanks, dlvd. E ..... lb. .11½ - —
tanks, dlvd. W ..... lb. .12½ - —

Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J lb. .19½ - —
dms., l.c.l., t.l., Newark, N. J lb. .20½ - —
dms., c.l., t.l., Memphis, Tenn. lb. .18 - —
dms., l.c.l., t.l.l., Memphis, Tenn. lb. .19 - —
tanks, dlvd. E. of Denver ..... lb. .175 - —

Fusel oil, refd. dms. c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd. ..... lb. .19½ - —
tanks, dlvd. ..... lb. .15½ - —

G

G salt, bbls, frt. alld., 100% basis lb. .73 —

Gallic acid, NF VII, bbls. 1,000-lb. lots lb. 2.00 —
bbls., smaller lots lb 2.02 2.22
Tech., bbls., 1,000-lb. lots.. lb. 1.78 - —
bbls., smaller lots lb 1.80 2.00

Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —

Gammapicoline (see g-picoline).

Garlic oil, dom. bots. ..... oz. 4.75 6.05
Imp. bots. ..... oz. 4.50 5.00

Gaultheria oil (see Wintergreen oil).

Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd lb. .58 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —

Gelsemium root, bls.. ..... lb. .30 - .35

Gentian root, bls. ..... lb .24 - —
Grd., bbls., bxs ..... lb .30 - —
Powd., bbls. bxs. ..... lb .30 - —

Geraniol, extra cns. dms. ..... lb 1 75 2.40
Soap grade, dms ..... lb .90 1.75
Standard, cns., dms. ..... lb. 1.65 —
Synthetic, dms ..... lb 1.30 —

Geranium oil, Algerian, cns..... lb. 19.00 -22.00
Bourbon, cns. ..... lb. 19.00 -22.00
Turkish (see Palmarosa oil).

Geranyl acetate, cns lb 1.90 2.70
Synthetic, dms ..... lb 1.45 —

Ginger oil, dist., bots. ..... lb. 12.00 -14.00

Ginger oleoresin, NF from African root, bots lb 4.25 5.00
NF, from Jamaican root, bots. lb. 7.75 - —

Ginger root, Cochin, bgs ..... lb. .19½ - —
Jamaican, No. 3, bgs..... lb. .28 - —
Nigerian, split, bgs ..... lb. .20 - —
Sierra Leone, bgs ..... lb. .35 - —

Glauber's salt (see Sodium sulfate).

Gluconic acid, tech., 50% dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b works lb. .17 - —

Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½ - —
164 jellygrams, bgs., c.l., same basis lb. .18½ - —
191 jellygrams, bgs., c.l., same basis lb. .19½ - —
222 jellygrams, bgs., c.l., same basis lb. .21 - —

Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½ - —
135 jellygrams, bgs., c.l., same basis lb. .17½ - —
164 jellygrams, bgs., c.l., same basis lb. .18½ - —
180 jellygrams, bgs., c.l., same basis lb. .19½ - —
200 jellygrams, bgs., c.l., same basis lb. .20½ - —

Bone glue, l.c.l., prices 2c higher.

Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½ - —
150-177, bgs., c.l., dlvd lb. .22½ - —
178-206, bgs., c.l., dlvd lb. .25 - —

Glue, hide, 207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½ - —
267-298, bgs., c.l., dlvd lb. .32½ - —
299-330, bgs., c.l., dlvd lb. .34½ - —
331-362, bgs., c.l., dlvd lb. .36½ - —
363-394 bgs., c.l., dlvd lb. .38 - —

Glue, hide, 395-427, bgs., c.l., dlvd. lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494, bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —

Hide glue, l.c.l. prices 2c. higher.

l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —

l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 -300.00
Bots., 50-kilo lots ..... kilo. 100.00 - —
Bots. 500-kilo lots ..... kilo. 75.00 - —

Glycerine, dom., nat., crude, saponification 88%, tanks, dlvd, lb. .13½ - .14
nat., crude, soapiye, 80%, tanks, dlvd lb. .12½ - .12¾
nat. refd., USP, CP, 99%, dms., c.l., dlvd lb. .26⅝ - —
dms., l.c.l., dlvd..... lb. .27⅜ - —
tanks, dlvd. ..... lb. .24⅞ - —

Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .25¾ - —
dms., l.c.l., dlvd. ..... lb. .26½ - —
tanks, dlvd. ..... lb. .24 - —

nat., high gravity, dms., c.l., dlvd lb. .26½ - —
dms., l.c.l., dlvd ..... lb. .27¼ - —
tanks, dlvd. ..... lb. .24¾ - —

Glycerine, dom., 99.5%, dms., c.l., dlvd lb. .26¾ - —
dms., l.c.l., dlvd..... lb. .27½ - —
tanks, dlvd. ..... lb. .25 - —

Imp., nat., crude, soaplye, 80%, c.i.f. lb. Nom.

Glycine (see Aminoacetic acid).

Glycerol (see Glycerine)

Glycolic acid (see Hydroxyacetic acid).

No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 .31

Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 - —
dms., l.c.l., same basis lb. .42 - —
tanks, same basis lb. .39 - —

Glyoxal, 30%, dms., c.l., works lb. 20½ - —
dms., l.c.l., works lb. 21¼ - —
tanks, works lb. .18 - —

Golden seal root, NF, tested, bls. lb 2.90 3.00

Gramicidin, 1 to 5 kilos, f.o.b. works gram. 4.25 - —

Grapefruit oil, dms lb. 2.75 2.90

Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90% powd., bgs., fib. dms., ex whse lb. .19 .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 .24½

Graphite, 95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½

Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31

Grease, white, choice all hog, tanks, dlvd lb. .08⅜ - .08½
Yellow, tanks, dlvd. ..... lb. .07½ - .07⅝

Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .12½ - —
dms., l.c.l., same basis..... lb. .14½ - —
tankcars, same basis ..... lb. .11 - —

Extra winter, strained, dms., c.l., Chicago lb. .15½ - —
dms., l.c.l., same basis..... lb. .17½ - —
tankcars, same basis ..... lb. .14 - —

Grease oil, prime, burning, dms., c.l., same basis, Chicago lb. .17½ - —
dms., l.c.l., same basis..... lb. .19½ - —
tankcars, same basis..... lb. .16 - —

Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls lb 40 —
Guaiacol NF cryst. dms., tins lb 2.10 2.15
liq., cbys., dms ..... lb. 2.30 - 2.40
Guaiacwood oil, cns. ..... lb. .65 .80

Guaiacol carbonate, NF VII, dms lb. 2.40 - 2.48
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt. lb. .38 - —
bgs., l.c.l. same basis ..... lb. .40 - .43
Indust., bgs., c.l., same basis. lb. .33 - —
Tech., bgs., c.l., same basis.... lb. .30 - —

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls. c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., l.c.l., same basis lb. 1.05 - —

Hansa yellow 10 G, bbls., dlvd, E. of Rockies lb 2.45 —

Hansa G yellow, pigment, bbls. lb. 2.20 - —

Hawthorn berries, bgs. ..... lb. .18 - .20

Heliotropin, 100-lb. lots, dms.... lb. 2.60 - 3.40

Hellebore root, dom., green, bls lb. .70 - .75

Helonias root, bls. ..... lb. 1.50 - —

Hemlock oil, cns. ..... lb. 2.55 3.00

Henbane, leaves, bls .. .. lb. .40 - .45

Heptachlor, dms., c.l., t.l., frt. alld., 100% basis lb. .96 - —

Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .1625 - —

Hesperidin, purif., 50 kilos, f.o.b. works kilo. 19.70 - —

Hesperidin methylchalcone, 50 kilos, f.o.b. works kilo. 49.25 - —

Hexachlorophene, dms., 1,100 lbs. or more lb 1.84 - —
dms. to 1,100 lbs. lb 1.94 - —

Hexalin (see Cyclohexanol).

Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots same basis. lb. .253 - —

Hexamethylenetetramine, tech., fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms. smaller lots, same basis lb. .253 - —

USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd New York City and Philadelphia lb. .42½ - —
bgs., smaller lots, same basis lb. .43½ - .48⅛

Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .16 - —

1-Hexanol, dms., c.l., works ... lb. .35 - —
dms., l.c.l., works ..... lb. .35¾ - —
tanks, works. lb. .33 - —

Hexyl cinnamic aldehyde, dms lb. 3.95 - 4.00

n-Hexyl methacrylate, dms., c.l., works lb. .75½ - —
dms. l.c.l. works lb. 76 - —

Hexyl salicylate, dms. ..... lb. 1.70 1.75

Hexylene glycol, dms., c.l., dlvd lb. .17½ - —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd lb. .15 - —

Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms. smaller lots, dlvd lb. 14.50 - —

Homatropine hydrobromide, USP, bots oz. 3.25 - —

Homatropine methylbromide, USP, bots oz. 3.00 - 3.25

Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —

Horehound herb, bls lb. .18 - .20

Hydrastis (see Goldenseal).

Hydrazine hydrate, 85%, 240-lb. dms., c.l., works lb. 1.28 - —
240-lb. dms., l.c.l., works. lb. 1.35 - 1.55

Hydriodic acid, purif., 47%, 2-cbys., f.o.b works lb. 2.92 - —

Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼ - —
dms., l.c.l., dlvd. zone 1 lb. .29¾ - .30⅛
tanks, dlvd. zone 1 lb. .27¼ - —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys. frt equald lb. .48 - .56

Hydrochloric acid, anhyd. (see Hydrogen chloride)

Hydrochloric acid, 18° cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l. dlvd Metropolitan area 100 lbs 3.15 - —
tanks works frt equald ton. 30.00 - —
22°, cbys., c.l., works....100 lbs. 3.25 - —
cbys., l.c.l. dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt equald ton. 35.00 - —

Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works lb. .15¾ - —
cbys., l.c.l., same basis lb. .17¼ - .17¾
5-pint bots., extra cs., c.l., same basis lb. .20¾ - —
lb. .20¾ - —

Hydrocortisone acetate, bulk, bots., kilo lots or more gram. .95 - —

Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.00 - 1.90

Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint. .70 - —

Hydrofluoric acid, anhyd. (see Hydrogen fluoride)

Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd 100 lbs. 19.25 - —
55-gal. dms., l.c.l., t.l.l., dlvd 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd 100 lbs 21.00 - —
20-gal., dms., l.c.l., t.l.l., dlvd. 100 lbs. 22.50 - —
tanks, works frt. equald 100 lbs. 13.40 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .07 - —

Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb cyls., l.c.l., works lb. .55 - .60

Hydrogen chloride, anhyd., 50-lb. cyls. l.c.l., works lb. .45 - —

Hydrogen cyanide, liq., 98% tanks, works lb. .14 - —

Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30¼ - .32⅛
cyls., dlvd W lb. .39 - —
tanks, works lb. .18 - —

Hydrogen peroxide, 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd lb. .1800 - —

Hydroquinone, photo grade, dms., 50-lbs. f.o.b. works lb 1.10 - —
Tech. dms. c.l. dlvd. ..... lb. 82½ - —
dms., l.c.l. dlvd. ..... lb. .84½ - —

Hydroquinone monomethyl ether, dms., t.l., dlvd lb 2.50 - —
dms., t.t.l., dlvd. lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle W Va lb. .073 - —
Hydroxycitronellal, cns. lb. 5.65 - 6.00
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .74 - —
fib. dms. 2,000 to 19,999-lb lots, same basis lb. .79 - —
fib dms. 100 to 1,999-lb lots, basis lb. .83 - —
Hydroxyethyl cellulose, fib. dms., smaller lots, same basis lb. .93 - —
(Highest viscosity [15,000 cps.] grade is 10c. per lb. higher.)
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz 7.75 8.50
Hyoscyamine sulfate, bots oz 7.75 8.50
Hypophosphorous acid, purif., 50%, 10-cbys. f.o.b works lb 1.95 - —
NF 50% 10-cbys., same basis lb 1.35 - —

I

Ichthammol NF dms. lb. .75 1.05
Indigo (see Dyes, coaltar, 1171 Indigo, syn.)
Indole, CP, bots. lb. 13.65 -15.00
Inositol 50-100 lb dms., 1,000 lbs or more, dlvd lb 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs dlvd lb 5.00 - —
5 lb bots. dlvd lb 5.25 - —
Insect flowers (see Pyrethrum)
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb 2.20 - 2.22
Iodochlorohydroquinolin, USP dms. lb 3.60 - —
Iodoform, NF dms. 300-lbs. f.o.b works lb 4.90 - —
dms. 100-lbs. same basis lb 5.05 - —
a-Ionone, cns lb 4.60 5.75
b-Ionone cns lb 4.15 6.15
Ipecac root, whole, bgs lb. 8.00 - 8.50
Powd., bbls., bxs lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .30 - .32
Iron blue alkali-resisting, bbls., c.l., dlvd. E lb. .60 - —
bbls. t.e.l. ton lots same basis. lb. .61 - —
bbls., smaller lots, same basis. lb. .62 - —
Dom., reg. bbls., c.l., dlvd. E lb. .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb. .56 - —
bbls. t.e.l. smaller lots same basis lb. .57 - —
Imp. British reg. bbls. c.l. dlvd. E lb. .48 - —
bbls. t.e.l. ton lots same basis lb. .49 - —
bbls., t.e.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide black pure bgs., c.l., works lb. .14¾- —
bgs. t.e.l. works lb. .15 —
Iron oxide, brown pure bgs., c.l., works lb. .14¼- —
bgs., t.e.l. works lb. .14½ —
Iron oxide, metallic brown, bgs., works lb. .05½- —
Iron oxide Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red nat. 75-85% ferric oxide bgs., c.l., works lb. .06¼- —
bgs. t.e.l. works lb. .06½- —
Iron oxide Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., t.e.l. ex dock lb. .06 Nom.
bbls., t.e.l., ex whse. New York. lb. .06½ Nom.
Iron oxide yellow, nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs. t.e.l lb. .023 .024
Iron oxide, yellow, pure, light lemon shade bgs c.l. works lb. .12¾- —
other shades, same basis lb. .12 - .12¾
Isoamyl alcohol dms., c.l., works, frt. alld E lb. .27½- —
dms., t.e.l., same basis lb. .29 - —
tanks, same basis lb. 25 —
Isoborneol cns lb 1.44 1.80
Isobornyl acetate cns lb 46 56
Isobornyl formate, dms lb. 1.15 1.20
Isobornyl propionate, dms lb. 1.20 1.25
Isobutyl acetate, perfume grade cns lb. .30 - .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., t.e.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol dms., c.l., dlvd lb. .15½- —
dms., t.e.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms. t.e.l. dlvd. lb. .28½- —
Tech., dms. c.l. dlvd. lb .22 —
dms., t.e.l., dlvd. lb. .23½- —
tanks, dlvd lb. .19½- —
Isobutyric acid, dms., c.l., t.l., dlvd. lb .35 - —
dms., t.e.l., t.t.l. same basis lb. .36½- —
t.e. t.t. same basis lb .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., t.e.l., dlvd lb. .48½- —
tanks, dlvd lb. .45 - —
Isoeugenol, cns. lb. 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb fib. dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .20½- —
dms., t.e.l., dlvd. E. lb. .22 - —
tanks, dlvd. E lb. .18 - —
Isopentane, comi. grade, tanks, f.o.b Tex refy gal. .16½- —
Isophorone, dms., c.l., dlvd lb. .24½- —
dms., t.e.l., dlvd lb. .25¼- —
tanks, dlvd lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .19 - —
dms., t.e.l., same basis lb. .20 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., t.e.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., t.e.l., dlvd. gal. .68 - —
tanks, dlvd gal. .42 - —
95%, c.l., dms., dlvd gal. .60 - —
dms., t.e.l., dlvd. gal. .70 - —
tanks, dlvd. gal. .44 - —
Anhyd., c.l., dlvd gal. .62 - —
dms., t.e.l., dlvd. gal. .72 - —
tanks, dlvd gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd. lb. .20½- —
dms., t.e.l., dlvd. lb. .21 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., t.e.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., t.e.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb. .39½- —
bgs., t.e.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½- —
bgs., 500-lbs. same basis lb. .36 - —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls lb. .55 - .60
NF, powd., bbls., bxs lb. .65 - .70
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb. 16 17
Juniper berry oil, NF, bots. lb. 2.90 3.75
Twice rectified, bots. lb. 3.25 —
Juniper tar oil, NF, dms. lb. .42 .60
Juniper wood oil, tech., cns. lb. .38 .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib dms. lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .11 - .12

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb .2135- —
80%, bbls., c.l., dms., frt. equald. lb. .3335- —
bbls., dms., 20 or more, frt equald lb .3385- —
bbls., dms., 5 to 19 frt. equald. lb. .3435- —
Lactic acid, 80%, bbls., dms, 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., obls., works lb .2740- —
bbls., 20 or more, works lb .2790- —
bbls. 5 to 19 works lb 2840- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls. c.l., works lb 4x25- —
bbls. 5 to 19, works lb 4725- —
bbls., 1 to 4, works lb 4775- —
Tech., 44%, bbls., c.l., works. 100 lbs. 12.45 - —
bbls., t.e.l., works 100 lbs 12.85 - —
USP, 85%, cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots, frt equald lb. .14¾- —
bgs., 200-lb lots, frt equald lb. .15¼- —
Edible lactose in fib dms. ½c higher.
Lactose, ferment, grade, bgs. c.l., works lb. .08¾- —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb lots frt equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l., frt. equald lb .19 19¾
Lady's slipper root, bls lb 3.00 3.50
Lamp black, bgs., c.l., works lb. .16 .45

MONTROSE
CHEMICAL COMPANY
100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate
T.C.P.— Tricresyl Phosphate
Cresyl Diphenyl Phosphate
D.D.T.— Dichloro Diphenyl Trichloroethane
Ethyl Silicate 28% — 40%
Triphenyl Phosphate

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Lanolin, USP anhyd. 400-lb dms., works	lb	.24	.28
USP, annyd., cosmetic, 400-lb dms, works	lb	.26	.30
USP hydrous 400-lb dms, works	lb	.29	—
Lard, cash, dms., Chicago	lb.	.11	—
Lard oil (see Grease oil).			
Larkspur seed bgs	lb	.55	—
Laure[illegible] cns.	lb	[illegible]	12.50
Laurent's acid, bbls	lb.	.87	—
Lauric acid, pure, dms	lb	30¼-	.32¾
bags	lb.	28¾-	.31¼
tanks	lb	.27¾-	—
Laury alcohol bots	lb	2.00	2.50
n-Lauryl methacrylate, dms., c.l., t.l. works	lb	65½-	—
dms [illegible] works	lb	63	—
Lavandin oil, 22-24%, dms.	lb	1.15	—
Abrial, dms.	lb.	1.20	—
Lavender flowers, medium, bls	lb	.55	.60
Ord bls	lb	.20	.25
Select, bls	lb	.90	1.00
Lavender flower oil, USP, French, 35-37% ester, cns	lb	1.85	4.00
40-42% ester, cns.	lb.	3.50	3.65
Spike, Spanish, cns	lb	1.75	2.00
Lead acetate, NF, cryst., gran., powd., bbls	lb.	34½-	—
White, cryst, bbls.	lb.	25½-	—
gran, bbls.	lb	26½-	—
powd, bbls	lb.	26½-	—
Lead arsenate acid powder, dealers, 3-50-lb bgs or any quantity frt alld on $150 or more	lb	30¼-	—
1-lb bgs., same basis	lb	47	—
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld	lb.	.17	—
bbls., l.c.l., same basis	lb.	.18	—
Lead carbonate (see Lead, white, basic carbonate)			
Lead chloride, 400-lb. fib. dms	lb.	.56	—
Lead iodide NF V lars	lb	3.82	—
Lead linoleate, fused, 26.5% Pb, dms.	lb	.38	—
Lead metal, prime, pigs, New York.	lb.	.11	—
St. Louis	lb.	.1080-	—
Lead monosilicate, bgs., c.l., works, frt equald	lb.	.1385-	—
bgs. l.c.l., same basis	lb	1485-	—
Lead naphthenate, liq., 16% Pb., dms., dlvd	lb.	19½-	—
24% Pb, dms., dlvd	lb.	24¼-	—
Solid, 47% Pb., dms dlvd	lb	31¾-	—
Lead nitrate, tech., cryst., 400-lb. fib. dms	lb.	.2675-	—
Lead orthosilicate gel., 50-60% PbO_2, dms works	lb.	29¾-	.34¼
Lead peroxide tech powd., bbls	lb.	.45	.50
Lead phthalate dibasic, dms, works.	lb.	.41	—
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald.	lb.	.1375-	—
bbls. l.c.l., same basis	lb.	.1475-	—
97% Pb_3O_4, bbls., c.l., same basis	lb.	.1395-	—
bbls., l.c.l., same basis	lb.	.1495-	—
98% Pb_3O_4, bbls., c.l., same basis	lb.	.1410-	—
bbls., l.c.l., same basis	lb.	.1510-	—
Lead, resinate, precip., 23%Pb, dms.,	lb.	.40	—
Lead salicylate, normal dms., works	lb.	.46	—
Lead silicate (see Lead white basic silicate).			
Lead silicochromate, bgs., c.l., f.o.b. mfrs point, frt. alld	lb.	.20	—
bgs., l.c.l., same basis	lb.	.21	—
Lead sulfate (see Lead blue basic sulfate).			
Lead tallate, liq. 16% Pb, dms	lb.	.17¼-	—
24% Pb, dms	lb.	.21¼-	—
Solid, 30% Pb, dms	lb.	.26¾-	—
Lead white, basic carbonate, bgs., c.l. shipt pt., frt. alld	lb.	.18	—
bgs. l.c.l., same basis	lb.	.19	—
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld	lb.	.16½-	—
bgs., l.c.l., same basis	lb.	.17½-	—
Lecithin, edible, tech, bleached, non-ret, dms., c.l., works.	lb.	.14	.15
non-ret dms., l.c.l., same basis	lb.	.15	.16
unbleached, non-ret, dms., c.l., same basis	lb.	.13	.14
non-ret, dms, l.c.l., same basis	lb.	.14	.15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works	kilo.	14.20	—
Lemon oil, USP, Calif., cns., dms.	lb.	1.80	2.65
Messina, cns	lb.	4.00	6.50
Lemongrass oil, cns., dms	lb.	2.60	2.75
dl-Leucine, dms., 1 kilo, works	kilo.	50.00	—
Licorice root, gran., bls.	lb.	.13	—
Powd, bls.	lb.	.15	.16
Whole, bls.	lb.	.09	.10
Lignaloe wood oil, Mexican, cns	lb.	2.75	3.50
Lignosulfonate (see under: Ammonium or Sodium lignin sulfonate)			
Lilac oil	lb.	1,500.00	
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E.	ton.	14.25	—
Chemical, hydrated, bgs., c.l., same basis	ton.	17.25	—
spray, bgs., c.l., same basis	ton.	18.25	—
For New York delivery, add $6.29 freight charge			
Lime oil, dist., Mexican, dms	lb.	5.50	6.00
West Indian, dms	lb.	5.50	6.00
Expressed, West Indian, dms	lb.	6.50	7.75
Lime salts (see Calcium).			
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).			
Linalool, ex bois de rose oil, dms.	lb.	2.45	4.25
Syn., 98-100%, dms., works	lb	2.40	2.75
Linalyl acetate ex bois de rose, 90-92%, dms	lb	2.65	4.50
96-98% dms	lb	3.25	—
Syn., 98-100%, dms., works	lb.	2.75	—
Lindane, 25% formulation, to distributors, dms, frt. alld.	lb.	1.35	1.50
99%, tech, to formulators, 250-lb. dms., 5,000 lbs., dlvd	lb.	2.13	—
100-lb dms., 5,000-lbs. dlvd.	lb	2.15	—
250-lb. dms, less than 5,000-lbs., dlvd	lb	2.18	—
100-lb dms, less than 5,000-lbs. dlvd	lb	2.20	—
Linden flowers, with leaves, bls	lb.	.35	.40
Without leaves bls.	lb.	.42	.45
Linseed meal, expeller, 32%, bulk, Minneapolis, mills	ton.	60.50	—
Extracted, 34%, bulk, same basis.	ton.	55.00	—
Linseed oil, raw, dms., c.l., New York	lb.	.1670-	—
dms., l.c.l., New York	lb.	.1760-	.1810
tanks, f.o.b. Minneapolis	lb.	.1310-	—
tanks, New York	lb.	.1422-	—
tankwagon, New York	lb.	.1472-	—
Boiled linseed oil, .006c. per lb higher.			
Linseed oil acid, dist., dms.	lb.	.2075-	.2325
Water white, dms.	lb.	.2425-	.2675
Litharge, comi., powd, bbls., c.l., works, frt. equald	lb.	.1325-	—
bbls., l.c.l., same basis	lb.	.1425-	—
Lithium aluminum hydride, lump, dms., works	lb.	33.00	39.00
Lithium benzoate, dms.	lb.	1.65	1.67
Lithium bromide, NF, gran., bgs., works, frt. equald	lb	2.60	—
Lithium carbonate, NF, dms., ton lots	lb.	.58	—
dms., 1,999 lbs. or less	lb.	.64	—
Tech., dms., ton lots	lb.	.57	—
dms., 1,999 lbs. or less	lb.	.63	—
Lithium chloride, CP, annyd., dms., ton lots	lb.	1.23½-	—
Tech, anhyd, dms., c.l., t.l., dlvd, or works, frt. alld	lb.	.87	—
dms, l.c.l., same basis	lb.	.88	.93
Lithium citrate NF dms, ton lots.	lb.	1.50	—
Lithium fluoride, dms., 20,000-lb. lots, dlvd	lb.	1.75	—
bbls., ton lots and more, dlvd	lb.	1.85	—
bbls., less ton lots, dlvd	lb.	1.90	—
Lithium hydride, powd., dms., 500-lbs lots or more, works.	lb.	9.50	—
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld	lb.	.60	—
dms., l.c.l., frt. alld	lb.	.64	—
Lithium manganite, dms, works	lb.	.95	1.05
Lithium nitrate, tech, dms., 100-lb lots	lb.	1.15	1.25
Lithium salicylate, dms.	lb.	1.60	1.70
Lithium silicate, dms., works	lb.	1.10	1.20
Lithium stearate, dms, c.l., works.	lb.	47½-	—
dms, ton lots, works	lb.	46½-	—
dms., less-ton lots, works	lb.	53½-	—
Lithium sulfate, dms., 100-lb. lots.	lb	1.15	1.25
Lithium titanate, dms., works	lb.	1.15	1.25
Lithol red toner, barium, bbls., works	lb.	1.03	—
Lithol-rubine red toner, pure, bbls., works	lb.	1.65	—
Resinated, bbls., works	lb.	1.47	—
Lithopone, ord, bgs, c.l., dlvd, E.	lb.	.08¾-	—
bgs., l.c.l., dlvd, E	lb.	.09½-	—
Titanated (high-strength), bgs., c.l., dlvd	lb.	.11	—
bgs., l.c.l, dlvd.	lb.	.12	—
Lobelia herb, bls	lb.	.95	1.10
Lobeline sulfate, bots., 50-oz. lots, works	oz.	30.00	—
Locust bean gum, powd., bgs.	lb.	.35	.40
Lycododium, cs.	lb	2.50	3.00
l-Lysine monohydrochloride, 25-lb. dms	lb.	4.95	—

M

Mace, Siauw, No. 1, bls.	lb.	1.58	—
No. 2, whole, bls.	lb.	1.40	—
siftings, bls	lb.	1.35	—
Mace oil, dist., cns., dms	lb.	9.00	11.00
Magnesia, calcined, tech., bgs., cns., frt equald	lb.	.25¾-	.26½
Tech, syn., rubber grade, light, bgs., c.l., frt. equald	lb	.28¾-	.30
rubber grade, extra light, bgs., c.l., frt. equald	lb.	.28	—
bgs., l.c.l., frt. equald	lb.	.28¾-	—
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points			
Magnesia, calcined, tech., heavy, 85% bgs. c.l., f.o.b. Lunning, Nev	ton.	39.50	—
91%, bgs., c.l., same basis.	ton.	49.50	—
95%, bgs., c.l, same basis	ton	59.00	—
USP, light, bgs.	lb.	.36½-	.37½
USP, heavy, bgs	lb.	.36½-	.37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald	ton.	86.25	—
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chawelah, Wash	ton.	46.00	—
Magnesium bromide, 80-lb. dm., f.o.b. works	lb.	1.15	—
Magnesium carbonate, tech., bgs., c.l., frt. equald	lb.	.11	—
bgs., t.l., frt. equald	lb.	.11½-	—
bgs., l.c.l., frt. equald	lb.	.13½-	.14
USP, bgs., c.l., frt. equald	lb.	.13½-	—
bgs., t.l., frt equald	lb	.14	—
bgs., l.c.l., frt. equald	lb.	.15	16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.			
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works	lb.	.12¾-	—
dms. l.c.l., works	lb.	.14	.15
hydrous, 99%, flake, bgs., c.l., works	ton.	60.00	—
bgs., l.c.l., works	ton.	75.00	100.00
Magnesium gluconate 100-lb dm., f.o.b. works, E	lb.	1.43	—
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works	lb.	24½	25½
Magnesium lauryl sulfate, dms., c.l., frt. alld	lb.	22½-	—
dms., t.l., frt alld.	lb	23½	—
tanks, frt. alld.	lb.	21½-	—

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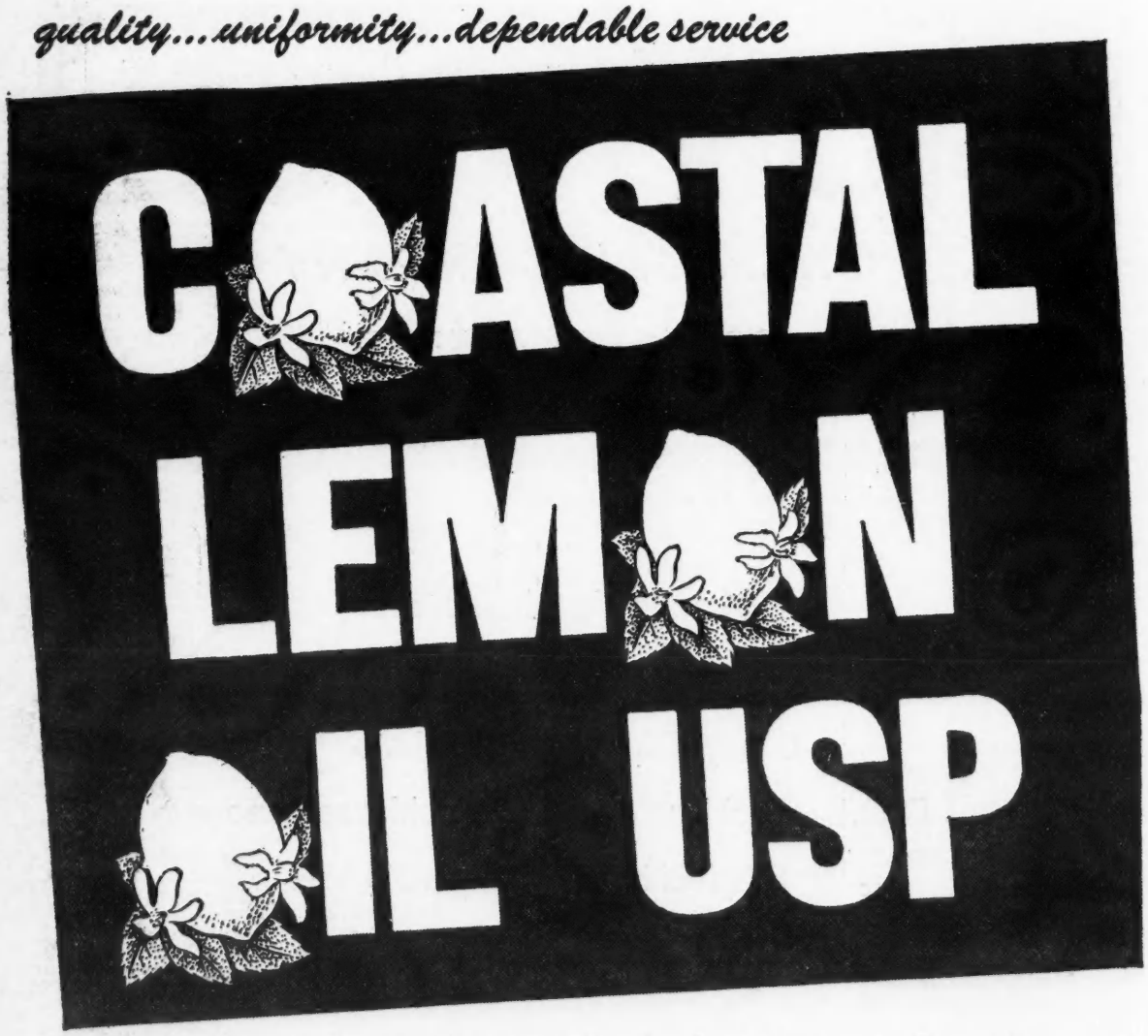

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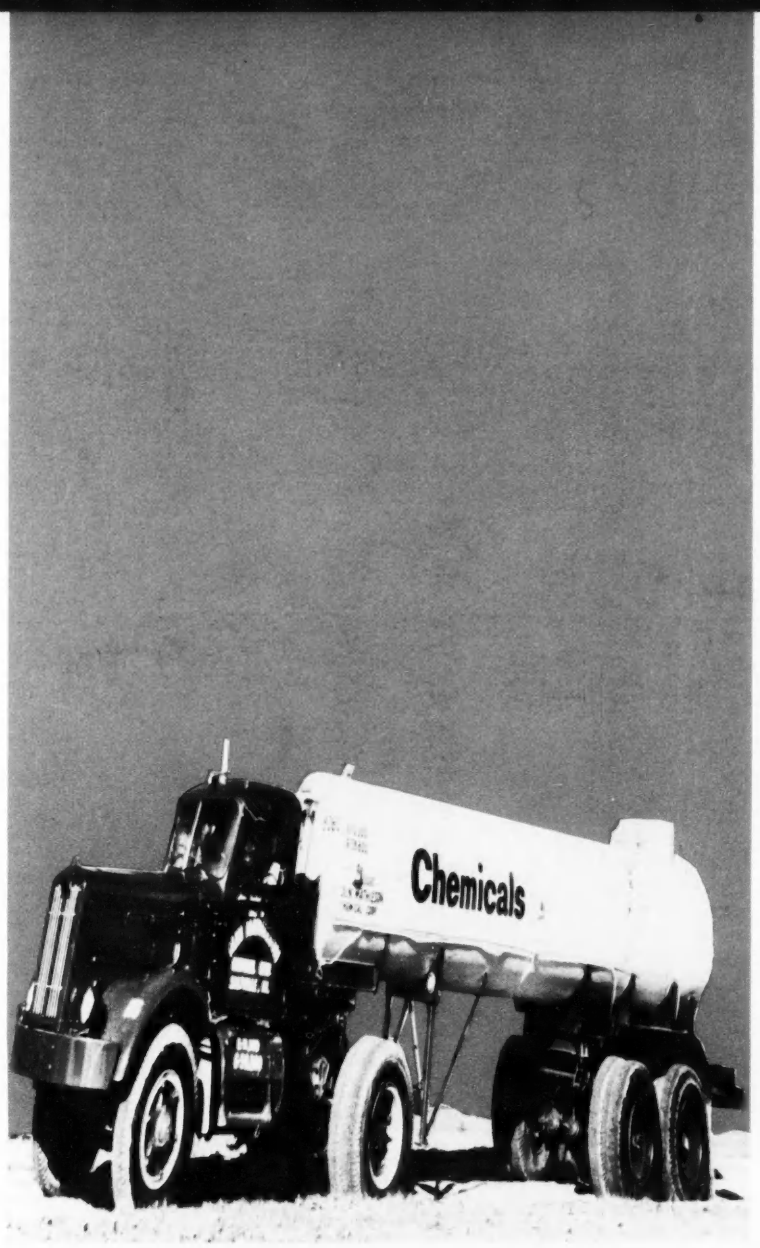

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Here is the literature available on MATHIESON INDUSTRIAL CHEMICALS

Safe and Efficient Handling of Anhydrous Ammonia (wall chart)
Anhydrous Ammonia Handling and Storage (22)
Aqua Ammonia Preparation (20)
Mathieson Caustic Soda (AD–1124)

Procedure for Handling 73%–74% and 50% Liquid Caustic Soda Tank Cars (MC–322–457)
Safe and Efficient Handling of Caustic Soda (AD–228–457)

Mathieson Chlorine (AD–1097–459)
Chlorine, Unloading and Safe Handling (AD–1122–959)

Mathieson Formaldehyde (MC–343)

Anhydrous Hydrazine (AD–1061–558)
Mathieson Hydrazine Solution (MC–348–158)

Mathieson Unsymmetrical Dimethyl Hydrazine (AD–1057–1157)
Mathieson b-Hydroxyethylhydrazine (MC–351–158)
Mathieson Hydrazine Salts (MC–352–158)
Mathieson Thiosemicarbazide (MC–359–1257)
Mathieson Hydrazodicarbonamide (MC–384–457)
Mathieson Hydrazine Dihydrochloride (MC–381–458)
Mathieson Monohydrazinium Phosphate (MC–385–1257)
Mathieson Monomethyl Hydrazine (MC–403—in process)

Home Pool Care (AD–1080–458)
Hypochlorination of Water (AD–164–459)
Keeping the Pool Safe and Sanitary (AD–159–359)

Mathieson Methanol (MC–393–758)

Safe and Efficient Handling of Nitric Acid (AD–1050–757)

Controlling Alkalinity with PH-Plus (AD–631)

Refining and Desulphurizing Cupola Iron with Purite (AD–321)

Scav-Ox (AD–1010–556)
Scav-Ox in High and Medium Pressure Boilers (MC–356–359)

Soda Ash, Handling and Storage
Unitized Loading of Soda Ash (MC–331)

Textone® for the Textile Industry, and Continuous Bleaching (AD–1005–R1058)
Textone Continuous Bleaching Process (MC–404–261)
Upgrading Inedible Fats with Chlorine Dioxide (AD–1032–1056)
C2® for Slime Control in Paper Mills (MC–400–459)
Laboratory Preparation of Chlorine Dioxide Water for Experimental Work (MC–339)
Treatment of Water Supplies with Chlorine Dioxide (MC–402—in process)

Mathieson Sodium Methylate (MC–398–1158)
Methods of Analysis (MC–347–356)
Storage and Handling (MC–368–956)

Mathieson Sodium Nitrate (MC–333–758)
Sodium Nitrate, Treating Industrial and Domestic Wastes (MC–397–659)

Mathieson Sulfur (MC–323–359)

Mathieson Sulfuric Acid (AD–1094–1158)
Safe and Efficient Handling of Sulfuric Acid (AD–1033–457)

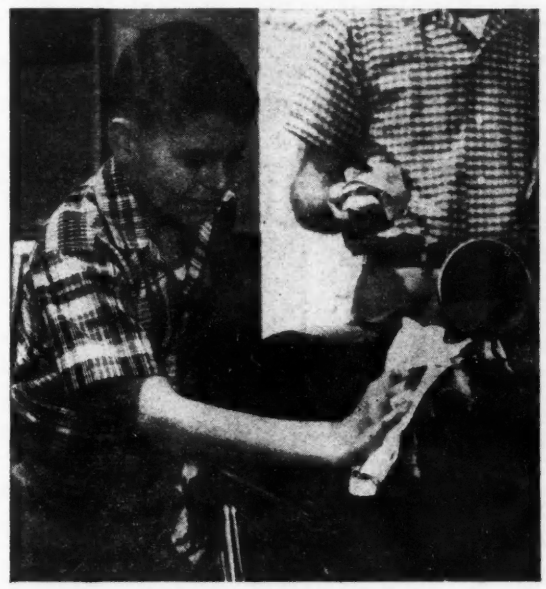
Mathieson Urea (AD–1109–759)

Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 · —
pigs., 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, same basis lb. .59 · —
Magnesium nitrate, cryst., dms., works lb. .29 · —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 · —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 · —
bgs, l.c.l., works 100 lbs. 2.90 · 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 · —
bgs., l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 · —
bgs., smaller lots 100 lbs. 3.35 · —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 · —
fib. dms., 1,000-lb. lots lb. .40 · —
fib. dms., 100-lb. lots lb. .45 · —
Bulky and super grades of magnesium trisicilate 7c. per lb. higher.
Malachite green, straight, PTA, bbls., works lb. 5.30 · —
Malathion, dms., c.l., works lb. .89 · —
dms., l.c.l., works lb. .92 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride dms c.l. frt. equald lb. .24 —
dms., l.c.l., frt. equald lb. .25½- —
tanks, frt equald lb 22½ —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms lb .50 —
Mandelic acid NF dms., 1,000-lb lots lb 2.35 —
dms. smaller lots lb 2.40 2.50
Mandrake root, bls lb. .45 · —
Manganese acetate, dms., dlvd lb .35 · —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 · .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton 148.00 · —
40,000 to 99,999-lb. lots, paper bgs., same basis ton 144.50 · —
40,000 to 99,999-lb. lots, dms. same basis ton 152.50 · —
Prices for manganese dioxide in 10,000 to 40,000-lb lots, $3 per ton higher
Manganese gluconate, dms lb. 1.84 · —
Manganese hydrate, dms., dlvd lb. .35 · —
Manganese hypophosphite, NF dms. lb. 3.52 · —
Manganese linoleate liq. 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd. E lb. .34½- —
dms., ton lots, dlvd E lb. .37 · —
dms., smaller lots, dlvd E lb. .39 · —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn dms lb 29¼- —
Precip. 6½-7% Mn, dms. lb. .42 · —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S. E ton 86.50 · —
bgs. l.c.l. dlvd S., E ton 93.50 · —
Manganese tallate 6%, dms lb .26½- —
Manila copal gum C, bgs lb. .35 .39
DBB, bgs lb. .24½ .28
DK dust, bgs lb. .14 Nom.
MA, soft, bgs lb. .20 .24
WS, bgs lb. No stocks.
Mannitol com'l fib dms., ton lots, works lb. .60 —
fib dms. to ton lots, works lb. .62 · —
fib dms. single dm., works lb. .65 · —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs. c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 · —
Menadione, USP bots. gram. .044 .05
Menhaden oil crude, tanks, works, Atl. & Gulf ports lb. .06¾- —
Menthol, nat USP, Brazilian large crystals, cs lb. 8.10 · —
Nat. USP Brazilian, regular crystals, cs lb. 8.00 · —
Japanese cs. lb. 10.50 -12.00
Syn., USP, racemic, 25-lb. lots lb. 4.25 · —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 · —
bgs. fib. dms. less ton lots, same basis lb. .46 · —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 · —
bgs. fib dms. less ton lots, same basis lb. .56 · —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb 4.03 · —
USP, gran or powd., 50-lb. dm., 100 lbs. f.o.b works lb. 3.78 · —
Mercuric cyanide, NF VIII, powd., fib dms lb 5.84 · —
Mercuric iodide, red, NF, 100-lb. dm. f.o.b. works lb. 6.97 · —
Mercuric oxide, red, NF IX 50-lb. dm. 100 lbs. f.o.b works, lb. 4.72 · —
tech., 50-lb dm. 100 lbs., same basis lb. 4.52 · —
yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 4.89 · —
tech., dms. 100 lbs lb 4.35 · —
25-lb fib dm lb. 4.38 · —
Mercurous chloride (see Calomel)
Mercurous iodide yellow, NF, 100-lb. dm f.o.b works lb. 8.22 · —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal 76 lbs. per flask, net-flask 200.00 -202.00
Mesityl oxide dms., c.l., dlvd lb. .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb 12½- —
Meta-aminophenol (see m-Aminophenol)
Metachloroaniline (see m-Chloroaniline)
Metanilic acid dms. works lb .57 .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms. truckloads frt equald lb. .42½- —
dms. smaller lots, frt equald. lb. .43 · .75
tanks works, frt. equald lb. .40 · —
Methanol, nat, denaturing grade, tanks frt alld gal. .85 · —
Syn., zone 1, dms., c.l., or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd. gal. .61½- —

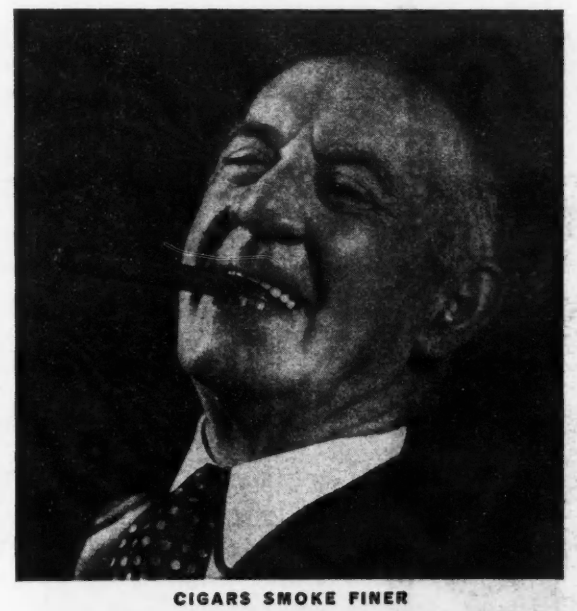
Methanol, syn., tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .33 · —
tankwagon, 4,000 gal. min., dlvd gal. .30 · —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 · —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd. Metropolitan area gal. .39 · —
tanks, 4,000 gal. min., dlvd. gal. .34 · —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 · —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt equald lb. 27.25 · —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld. lb 1.10 · —
dms., t.t.l., same basis lb. 1.16 · —
dl-Methionine, fib. dms., frt. alld., 50-lb or more lb 3.50 · —
Feed grade, 98% fib dms. same basis lb. 1.43 · —
Methoxychlor, 50% wettable powder, dealers, dms., cs lb. .66 · —
Methyl abietate, non-ret dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 · .22½

Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill. Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal 62½- —
Syn., dms., c.l., frt. alld. E. gal. .66 · —
dms., l.c.l., frt. alld. E. gal. .76 · —
tanks frt alld E. gal 51 —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., l.t.l., dlvd lb. .36¼- —
tanks, dlvd lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 · —
dms., t.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 · —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., l.c.l., same basis lb. 2.00 · —

N-Methylaniline, tech., tanks, frt. alld lb .60 —
Methylanthranilate, cns. lb 2.25 2.45
Methyl benzoate, cns., dms. lb .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 .72
on 100 lbs lb. .73 .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .89 · —
50-lb bgs. smaller lots, frt. alld on 100 lbs lb 1.05 · —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 · —
50-lb bgs. 2,000-lb lots and more, same basis lb. .76 —
50-lb bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb 12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb 67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 · —
dms., t.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12½- —



MAKE WAX SPREAD BETTER



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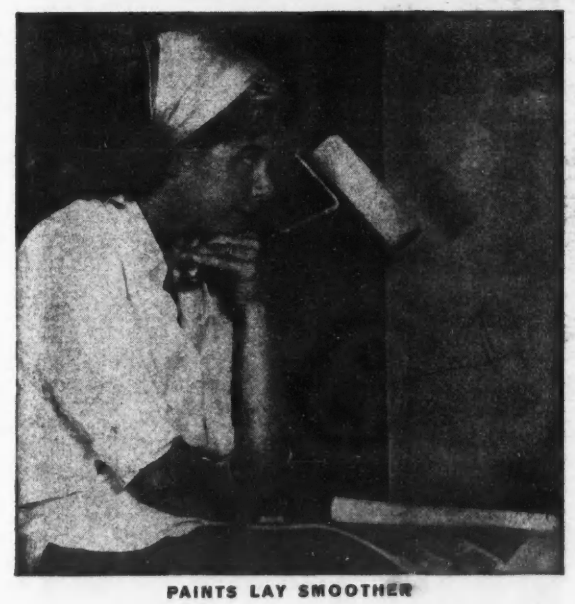

PAINTS LAY SMOOTHER

"Natural Products are our only business"

8-Methyl-5-ethyl pyridine, dms., c.l., works	lb.	.45	—
dms., t.c.l., works	lb.	.45¾	—
tanks, works	lb.	.43	—
Methyl formate, refd., dms	lb.	.35	.40
Tech. non-ret. dms., any quantity, works	lb.	.10	—
tanks, works	lb.	.07	—
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works	lb.	.26	—
100-lb. multiwall paper bgs., t.l. min 23,000 lbs., works	lb.	.27	—
100-lb multiwall paper bgs., l.t.l., works	lb.	.28	—
Methyl heptin carbonate, bots	lb.	27.25	29.00
Methyl p hydroxybenzoate, fib dms	lb	1.90	2.00
Methyl ionone, standard, cns., dms.	lb	3.40	3.85
Methyl isoamyl ketone, dms., c.l., dlvd	lb.	.20	—
dms., t.c.l., dlvd.	lb.	.20½	—
tanks, dlvd.	lb.	.17½	—
Methyl isobutyl carbinol (see Methyl amyl alcohol).			
Methyl isobutyl ketone, dms., c.l., dlvd	lb.	.17	—
dms., t.c.l., dlvd	lb.	.18½	—
tanks, dlvd	lb.	.14½	—
Methyl methacrylate, dms., c.l., t.l., frt. equald., with Belle, W Va	lb.	.31	—
dms., smaller lots, same basis	lb.	.31¼	—
tanks, same basis	lb.	.29	—
Methyl naphthyl ketone, cryst., cns	lb.	2.45	4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).			
Methyl parathion, tech., 80%, dms., frt. alld. E	lb.	.84	—
Methyl parathion prices 2c. per lb. higher in West.			
Methyl roseaniline chloride, NF., 5-lb. fib dms	lb	6.90	—
Methyl salicylate, dms., t.l., frt. alld	lb.	.60¼	—
dms., t.c.l., same basis	lb.	.62½	.67½
Methyl testosterone, USP, 100-gram bots	gram.	No Prices.	
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works	lb.	1.32	—
5-39 dm lots, same basis	lb.	1.37	—
tanks, same basis	lb.	1.27	—
Methyl violet toner, molybdated, PMA, bbls., dlvd. E of Rockies	lb.	2.95	—
Tungstated, PTMA, bbls., same basis	lb	4.35	—
Methyl violet prices 1c. higher W. of Rockies.			
Methylene blue, fib, dms., 100-lb. lots, frt. adjusted	lb.	4.67	—
Methylene chloride, tech., straight or assorted, dms., c.l. or t.l., dlvd	lb.	.12¼	—
dms., t.c.l., t.t.l. dlvd	lb.	.15¾	—
tanks, 4,000-gal. min., dlvd	lb.	.11¼	—
b-Methylnaphthalene, 32°C., m.p., dms., works	lb	.90	—
Methylpentanediol (see Hexylene glycol).			
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).			
Methylthionine chloride (see Methylene blue).			
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works	lb.	.04	—
roofing, 20 to 80 mesh, works	lb.	.03	—
wet-grd., biotite, bgs., c.l., works, frt. alld. E	lb	.06½	—
bgs., t.c.l., ex-whse.	lb.	.07¼	—
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E.	lb.	.08¼	—
bgs., t.c.l., ex-whse or freight alld. E	lb.	.09	—
Mica, wet-grd., rubber bgs., c.l., works, frt. alld. E	lb.	08	—
bgs., t.c.l., ex-whse. or frt. alld. E	lb.	.08¾	—
wallpaper bgs., c.l., works, frt. alld. E	lb.	.08¾	—
bgs., ex-whse or frt. alld. E.	lb.	.09	—
white, 5-10 microns, bgs., c.l., works, frt. alld. E	lb	08¼	—
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.			
Microcrystalline wax, petroleum, coating grades, tankcars, works	lb.	.10	.11
laminating grades, tankcars, works	lb.	.11	.12
Mineral black, bgs., works	lb.	.0160	.0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy	gal.	.70	—
non-ret., dms., t.c.l., same basis	gal.	.75	—
tankcars, refy.	gal.	.54	—
65-75 vis., non-ret., dms., c.l., same basis	gal.	.70½	—
non-ret., dms., t.c.l., same basis	gal.	.75½	—
tankcars, refy.	gal.	.54½	—
Mineral oil, white, NF, 80-90% vis., non-ret., dms., c.l., same basis	gal.	.71	—
non-ret., dms., t.c.l., same basis	gal.	.76	—
tankcars, refy.	gal.	.55	—
135-138 vis., non-ret., dms., c.l., same basis	gal.	.77	—
non-ret., dms., t.c.l., same basis	gal.	.82	—
tankcars, refy.	gal.	.61	—
145-155 vis., non-ret., dms., c.l., same basis	gal.	.83	—
non-ret., dms., t.c.l., same basis	gal.	.88	—
tankcars, refy.	gal.	.67	—
USP, 180-190 vis., non-ret., dms., c.l., same basis	gal.	.85	—
non-ret., dms., t.c.l., same basis	gal.	.90	—
tankcars, same basis	gal.	.69	—
200-210 vis., non-ret., dms., c.l., f.o.b. refy	gal.	.875	.90
non-ret., dms., t.c.l., same basis	gal.	.925	—
tankcars, refy.	gal.	.69	.715
340-350 vis., non-ret., dms., c.l., f.o.b. refy	gal.	.92½	—
non-ret., dms., t.c.l.	gal.	.97½	—
tankcars, refy.	gal.	.76½	—
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for t.c.l.).			
Mineral orange, American, bbls., c.l., works	lb.	.16	—
bbls., t.c.l., same basis	lb.	.17	—
Mineral spirits, petroleum, odorless, tankcars, New Jersey	gal.	.29	—
New York	gal.	.305	—
Houston, Texas	gal.	25	—
regular tankcars, New Jersey and New York	gal.	.18	—
Group 3	gal.	.12875	—
Houston, Texas	gal.	145	—
140 F. flash, New York, New Jersey at terminal	gal.	.205	—
Houston, Texas	gal.	17	—
Mink oil, dms	lb	2.75	—
Mirbane oil (see Nitrobenzene).			
MNPT maroon toner, kgs., c.l., works	lb	6.30	—
Molasses, blackstrap, feed grade, tanks, New Orleans	gal.	.14½	—
tanks, New York	gal.	.15½	.16
Molybdated orange, bbls.	lb	49	—
Molybdenum metal, powd., 80 or 200 mesh, ctns., works	kilo	7.84	—
325 mesh, ctns., works	kilo	9.13	—
Molybdenum trioxide, purif., dms., works	lb	1.15	—
Tech., chemical, dms., works, basis Mo content	lb	1.48	—
Tech., metallurgical, dms., works, basis Mo. content	lb	1.47	—
Molybdic acid, 84%, dms., works.	lb	1.03	1.15
Monoallylamine, dms., c.l., dlvd	lb	965	—
dms., c.l., dlvd.	lb.	995	—
tanks, dlvd	lb.	96	—
Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb	.57½	—
dms., t.c.l., same basis	lb.	59	—
tanks, same basis	lb.	55	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	55	—
dms., t.c.l., works	lb	56	—
tanks, works	lb.	.54	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E	lb.	.10½	—
dms., t.c.l., same basis	lb.	11½	—
tanks, same basis	lb.	08¾	—
Monochlorobenzene prices in the West 1¾c. higher.			
Monoethanolamine, dms., c.l., dlvd. E	lb	27½	—
dms., t.c.l., same basis	lb	.29	—
tanks, same basis	lb.	.25	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylortholuidine (see N-Ethyl-o-toluidine)			
Monoisopropanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., t.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½	—
dms., t.c.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis	lb.	.30	—
tanks, 100% basis	lb.	.26	—
30-35% soln., dms., c.l., frt. equald., 100% basis	lb.	.36	—
Monomethylamine, 30-35% soln., dms., t.c.l., frt. equald., 100% basis	lb.	.36½	—
tanks, frt. equald., 100% basis.	lb.	.26	—
40% soln. dms. frt. equald., 100% basis	lb.	.33	—
dms., t.c.l., frt. equald., 100% basis	lb	33½	—
tanks, frt. equald., 100% basis.	lb	26	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.29	—
bgs., l.c.l., dlvd. E	lb.	.30	—
Monopotassium glutamate, dms., 1,000 lb. lots, frt. alld	lb	3.05	—
dms., 100-lb. lots, same basis	lb	3.25	—
Monosodium glutamate, dms., dlvd.	lb.	1.07	1.15
Monosodium phosphate (see sodium phosphate, monobasic)			
Montan wax, Calif., refd., bgs	lb	.27	.28
Imp., crude, Bohemian, bgs	lb.	.25	.26
German, bgs	lb.	.25	.36
Morphine, cns., 100-oz., f.o.b. works.	oz.	12.35	—
Morphine hydrobromide, cns., 100-oz., f.o.b. works	oz	9.90	—
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works	oz	9.90	—
Morphine sulfate, USP, cns., 100-oz., f.o.b. works	oz	9.90	—
Morpholine, dms., c.l., dlvd. E	lb.	.55¼	—
dms., t.c.l., dlvd. E	lb.	.56¾	—
tanks, dlvd. E	lb.	.52¾	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib, dms., 100-lb. lots	lb	4.40	4.90
cns., 25-lb. lots	lb	4.50	5.00
Ketone, fib, dms., 100-lb. lots	lb	4.60	5.10
cns., 25-lb. lots	lb	4.70	5.20
Xylol, fib, dms., 100-lb. lots	lb	1.26	—
cns., 25-lb. lots	lb	1.40	—
Mustard seed, Danish, yellow, bgs.	lb.	.10	—
Montana, yellow, bgs.	lb.	.10½	—
Oriental, bgs.	lb.	.09	—
Mustard, oil, syn., bots.	lb.	1.60	1.85
Myristic acid, bgs.	lb.	.23¼	.25¾
tanks	lb.	.22¼	—
Myrrh gum, cs.	lb.	.65	.75

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This indispensable base, with the odor of fresh natural flowers, has a world-wide reputation.

Heiko-Neroli

This perfect artificial substitute for the natural oil will not discolor.

Heiko-Pink

This is one of our oldest products, recommended for all carnation compositions. Its distinctive strength gives it unusual retentive power.

Convallol

Its lily-of-the-valley odor gives compositions an extraordinarily natural and long-lasting perfume.

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HEINE & Co

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N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York	gal.	.19	—
Group 3	gal.	.13875	—
Houston, Texas	gal.	.155	—
Naphthalene, crude, dom., 78°, tanks, frt. equald	lb.	.06¼-	.06½
Refd., indust., chipped, crushed, bgs., frt. equald	lb.	.14½-	—
tanks, same basis	lb.	.11¾-	—
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis.	lb.	.15½-	—
cs. 50 lbs. c.l., same basis.	lb.	.15¾-	—
1-lb pkgs. c.l., same basis.	lb.	.18½-	—
a-Naphthol, dms., frt. alld	lb.	1.02	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.34	—
bbls., l.c.l., works	lb	.36	—
Naphthol, ITR red toner, bbls., works	lb	5.00	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)			
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)			
1-Naphthol-5-sulfonic acid (see L acid)			
1-Naphthol-5-sulfonic 8-amino acid (see S acid)			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid)			
a-Naphthylamine, dms., frt. alld	lb.	.52	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid)			
Naringin, fib, dms	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms	lb.	.29	Nom.
20° cold test, dms.	lb.	.28	Nom.
30° cold test, dms.	lb.	.27	Nom.
Neocinchophen USP dms., frt. adjusted	lb.	7.00	8.00
Neomycin sulfate fib dms., 1-kilo basis activity	gram.	.18	—
fib dms. 100-999-gram lots, basis activity	gram.	.25	—
Tech., fib, dms	gram.	.13½-	—
Neopentylglycol dms., c.l., dlvd	lb.	.32	—
dms. l.c.l. same basis	lb.	.33	—
Nerol, dms.	lb.	4.75	—
Neroli oil, NF, French, bots.	lb.	425.00	575.00
Tunisian, bots.	lb.	400.00	—
Nerolin, cns.	lb.	2.45	2.85
Neville and Winther's acid, dms., frt. alld	lb.	1.50	—
Niacinamide (see Nicotinamide).			
Nickel acetate bbls., dlvd.	lb.	.68½-	.75½
Nickel carbonate bbls., dlvd	lb.	78¼-	.85¼
Nickel chloride bbls., dlvd.	lb.	.37	.45
Nickel formate, bbls., ton lots, frt. alld	lb.	.72	.73
Nickel metal, electro cathodes, cs., works	lb	.74	—
Nickel nitrate, dms., frt. alld	lb.	.31½-	.33½
Nickel oxide, black, bbls.	lb.	.85	—
Green, bbls	lb.	.84	—
Nickel sulfate, bgs., c.l., dlvd.	lb.	.28	—
bgs., l.c.l., dlvd.	lb.	.28½-	.36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd	kilo.	5.75	6.50
dms. less than 100 kilos, dlvd.	kilo.	6.25	7.00
Nicotinamide hydrochloride, 50-kilo dms., dlvd	kilo.	6.50	7.50
Nicotine sulfate 40%, dealers, 50-lb. dms	frt. alld	lb 1.20	—
40% manufacturers, 500-lb. dms.,	frt. alld	lb 1.05	—
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	10¼-	—
Nikethamide, cbys.	lb.	5.00	—
Nitric acid, 36° Be., cbys., c.l., works E	100 lbs.	5.75	—
cbys., l.c.l., works E	100 lbs.	6.05	6.85
38° Be., cbys. c.l., works E.	100 lbs.	6.25	—
cbys., l.c.l., works E	100 lbs.	6.55	7.35
40° Be., cbys., c.l., works E	100 lbs.	6.75	—
cbys., l.c.l., works E	100 lbs.	7.05	7.85
42° Be., cbys., c.l., works E.	100 lbs.	7.25	—
cbys., l.c.l., works E	100 lbs.	7.55	8.35
58.5 to 68% HNO_3, tanks, works, 100% basis	100 lbs.	3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis	100 lbs.	4.90	—
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works	lb.	.18½-	—
cbys. extra l.c.l. works.	lb.	.20	—
5-pint bots. extra, cs., c.l., same basis	lb.	.22½-	—
5-pint bots. extra, cs., l.c.l., same basis	lb.	.24	.25
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works	lb.	.64	—
m-Nitroaniline, cryst., dms., frt. alld	lb	1.15	—
Paste, dms., frt. alld., 100% basis		1.10	—
o-Nitroaniline, flaked, dms., t.l., frt. alld	lb.	.49	—
dms. l.t.l., frt alld	lb.	.51	—
o-Nitroaniline orange toner kgs.	lb.	1.50	—
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd	lb.	.44½-	—
dms. l.c.l., same basis	lb.	.46½-	—
o-Nitroanisole tech. tanks frt alld.	lb.	.36	—
p-Nitroanisole, tech., solid, dms., frt alld	lb.	.72	—
Nitrobenzene, dbl dist., dms., c.l., frt. alld	lb.	.13	—
dms., l.c.l., frt. alld.	lb.	.14	—
tanks, frt. alld.	lb.	.12	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.63	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works	lb.	.37½-	—
bbls., l.c.l., same basis	lb.	.33½-	.40½
18-20, cps., bbls., c.l., same basis	lb.	.39½-	—
bbls., l.c.l., same basis	lb.	.40½-	.42½
250-400, 600-1,000 seconds, bbls., l.c.l. same basis	lb.	.43	.46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis	lb.	.43	—
bbls l.c.l., same basis	lb.	.44	.46
5-6 cps., 40-60 seconds, bbls., c.l., c.l. same basis	lb.	.42	—
bbls. l.c.l., same basis	lb	.43	.45

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene dms. c.l., frt. alld	lb.	.18	—
dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Nitrochlorobenzene dms.	lb.	.26	.27
2-Nitro-p-cresol, tech., dms., dlvd	lb.	.88	—
Nitroethane, dms., c.l., dlvd. E	lb.	.28½-	—
dms., l.c.l., dlvd. E	lb.	.30	—
tanks, dlvd E	lb.	.26	—
Nitroethane prices West of Rockies are 1c. higher.			
Nitrogen solutions, direct application, tanks, f.o.b. works	unit-ton.	1.64	—
Manufacturing type, same basis.	unit-ton	1.32	—
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va	lb.	.065	—
Cyls., t.l., min 5 tons, same basis	lb.	.07½-	—
Cyls., l.c.l., l.t.l., same basis	lb.	.15	—
Nitrogenous process tankage, bulk, works	unit-ton	4.50	5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago works.	unit-ton.	3.50	—
(The foregoing price is per unit NH_3, plus 50c, per unit a.p.a., bulk, f.o.b producers' works, Chicago.)			
Nitromethane, dms., t.l., dlvd. E	lb.	.26	—
dms., l.t.l., dlvd. E	lb.	.27½-	—
Nitromethane prices West of Rockies are 1c higher			
a-Nitronaphthalene, bbls., frt. alld.	lb.	.31	—
o-Nitrophenol, dms., works, frt. equald	lb.	.94	—
p-Nitrophenol, dms., c.l., frt. alld.	lb.	.45	—
dms., l.c.l., frt. alld	lb.	.47	—
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies	lb.	.28½-	—
dms., l.c.l., same basis	lb.	.30	—
tanks, same basis	lb.	.26	—
1-Nitropropane prices West of Rockies are 1c. per lb. higher.			
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies	lb.	.18½-	—
dms., l.c.l., same basis	lb.	.20	—
tanks, same basis	lb.	.16	—
m-Nitrotoluene, tech., dms., frt. alld.	lb.	.50	—
o-Nitrotoluene, dms., c.l., frt. alld	lb	.15	—
dms., l.c.l., frt alld.	lb.	.16	—
tanks, frt. alld.	lb.	.13	—
p-Nitrotoluene, tech., cast, dms., c.l., works	lb.	.27½-	—
dms., l.c.l., works	lb.	.28	—
flake, dms., c.l., t.l., works	lb.	.27½-	—
dms., l.c.l., works	lb.	.28	—
m-Nitro-p-toluidine, dms.	lb.	1.25	—
Nonylphenol, dms., c.l., frt. alld.	lb.	.22½-	—
dms., l.c.l., frt. alld.	lb.	.23½-	—
tanks, frt. alld	lb.	.20	—
Nonylphenol prices on shipments to Western States are 2c. higher.			
Noscapine, cns.	oz.	8.00	—
Nutmegs, East Indian, whole, bgs.	lb.	1.18	—
West Indian, bgs	lb.	1.20	—
Nutmeg oil, USP, dist., East Indian, cns	lb	9.00	12.00
West Indian, cns.	lb	9.00	12.00
Nux vomica, bls.	lb.	.20	—
Powd., bbls., bxs.	lb.	.20	.23

O

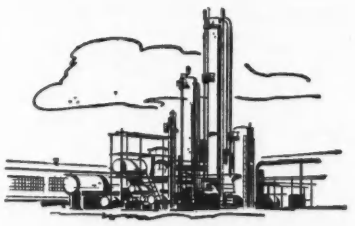
Ocher (see Iron oxide yellow, nat.)			
Ocotea cymbarum oil, dms.	lb.	.45	.47
Octane, indust., tanks, Bayonne, N.J	gal.	.20	—
1-Octanol, tech., dms., c.l., dlvd., Zone 1	lb.	43½-	—
dms., l.c.l., dlvd. Zone 1	lb.	.45½-	—
tanks, dlvd., Zone 1	lb.	.41	—
Octyl alcohol, perfumers grade, bots.	lb.	1.60	3.25
Octyl alcohol, tech., (see 1-Octanol, tech).			
tert-Octylamine, dms., c.l., t.l., f.o.b. works	lb	.54½-	—
dms. l.c.l. same basis	lb	.55	—
Octylphenol, bgs., c.l., works	lb.	.22½-	—
bgs., l.c.l., works	lb	.23	—
tanks, works	lb	.21½-	—
Octylphenol in dms., 11c. higher.			

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

"COOLING WITH PURECO CO_2 LIQUID...

eliminated a major bottleneck"*



*This statement was contained in an engineer's report concerning the use of CO_2 as a coolant by a company that sulfunates straight chain alcohol. CO_2 sparged directly into the chemicals in the reaction tank, maintains a controlled temperature of -70° F or below. Total time for cooling *55 minutes . . . former time 3 to 4 hours.*

Perhaps Pureco CO_2 Technical Service can save your company time and money, too!

New applications for Pureco CO_2 are being found constantly . . . new ways of doing things more efficiently and economically with this versatile chemical. The engineers in Pureco's Technical Service are highly trained in the application of its many uses . . . they are ready, willing and able to discuss, demonstrate or assist in the experimental development of CO_2 applications, whether they entail a new use for the product or the improvement of an existing one.

For example:

USE PURECO CO_2 AND/OR "DRY-ICE" AS A REFRIGERANT FOR . . .

Chill grinding of heat sensitive materials.
Chill grinding of animals' glands for hormones, etc.
Freeze-drying.
Blast chilling of environmental test chambers.

USE PURECO CO_2 AS A GAS FOR . . .

Inert blanketing of dyes, inks and other flammable mixtures.
Sparging of varnishes and other mixtures.
Distillation vehicle in distillation of phthalic anhydride in manufacture of resins.
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Inert pressure medium.

USE PURECO CO_2 AS AN INGREDIENT FOR . . .

Forming carbonates, especially barium carbonates.
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Controlling acidity—as in coagulating foam rubber.

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Pure Carbonic Company, A Division of Air Reduction Company, Incorporated
Nation-Wide Pureco CO_2 Service-Distributing Stations in Principal Cities
General Offices: 150 East 42nd Street, New York 17, N.Y.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT

Oiticica oil, l.q., dms	lb.	.15½ -	.16
tanks	lb.	.14 -	.14¼
Oleic acid, dbl.-dist. (white), dms.	lb.	.19¾ -	.22¼
tanks	lb.	.17¼ -	—
S. D., dms	lb.	.18¾ -	.21¼
tanks	lb.	.16¼ -	—
Oleum (see Sulfuric acid, fuming).			
Olibanum gum, siftings, cs	lb.	.15	.20
Tears, cs	lb	22	.30
Olibanum oil, bots	lb	5.00	7.65
Extra fine, bots	lb	8.00	9.50
Olive oil, edible, dms., spot, duty paid	gal.	2.30 -	2.40
Olivine, crude, works	ton	12.00	—
20 mesh, works	ton	15.00	—
100 mesh works	ton	20.00 -	—
Opium, USP, cns., 25-lbs., f.o.b. works	oz	19.20 -	—
gran. cns. 50 lbs. same basis	oz.	21.65 -	—
powd. cns. 50 lbs. same basis	oz	21.65	—
Orange oil, expressed, USP, Calif., cns., dms	lb	.70	.90
Calif., sweet, cns, dms	lb	—	—
Florida, cns., dms	lb	.9	.45
Messina cns	lb	3.25	5.00
West Indian, bitter, cns., dms	lb.	2.50	3.50
Orange peel, bitter, Haitian, bls	lb	18	.20
Sweet	lb	28	.30

ORANGE PIGMENTS

Orange pigment quotations are listed individually For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns	lb	1.80	2.30
Orris root, Florentine, bls	lb	.55	—
powd., bbls., bxs	lb	65	—
Verona, bls	lb	35	—
powd. bbls., bxs	lb.	45	—
Orthoanisidine (see o-Anisidine).			
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).			
Orthochloroaniline (see o-Chloroaniline).			
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).			
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)			
Orthochlorophenol (see o-Chlorophenol).			
Orthocresol (see o-Cresol)			
Orthocresotinic acid (see 2,3-Creosotic acid).			
Orthodichlorobenzene (see o-Dichlorobenzene).			
Orthonitroaniline (see o-Nitroaniline).			
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).			
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).			
Orthonitrophenol (see o-Nitrophenol).			
Orthonitrotoluene (see o-Nitrotoluene).			
Orthophenetidine (see o-Phenetidine)			
Orthophenylphenol (see o-Phenyl phenol)			
Ortho-tertiary amylphenol (see o-tert-Amylphenol)			
Orthotolidine (see o-Tolidine base)			
Orthotoluidine (see o-Toluidine).			
Ouabain USP bots	gram	3.00	4.00
Ouricury wax, crude, bgs	lb.	.52 -	—
Refd., pure, bgs.	lb.	.56 -	.57
Oxalic acid, bgs., c.l., works	lb	.18	—
bgs., 10,000-lb. lots, works	lb.	.19	—
bgs., smaller lots, works	lb.	.20½ -	—
Oxalic acid in drums is priced ½c. per lb higher.			
b-Oxynaphthoic acid, pigment manufacture, dms., frt alld	lb.	.912 -	—
Dyestuff manufacture, dms., same basis	lb	1.03	1.14
Oxyquinolin sulfate, cns., 100-lb lots, works	lb	4.75	5.00
cns., smaller lots, works	lb	4.92	5.17

P

Palm oil, clarif., dms	lb.	.14¾ -	.15¾
tanks	lb.	.12 -	—
Palm oil acid, double dist., dms	lb.	.16 -	.18½
tanks	lb.	.13½ -	—
single dist., dms	lb.	.15½ -	.18
tanks	lb.	13 -	—
Palmarosa oil, cns	lb	4.90	6.00
Papain, powd., bots.	lb.	3.25	10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots	oz.	5.00	—
cns., smaller lots	oz.	5.05	5.20
Papaverine sulfate, nat. or syn., USP, cns	oz	7.10	7.35
Paprika, Bulgarian, bgs	lb.	.32 -	—
Hungarian, bgs.	lb.	.33 -	—
Spanish, bgs	lb.	.30 -	—
Yugoslavian, bgs.	lb.	.38 -	—
Para-aminobenzoic acid (see p-Aminobenzoic acid)			
Parachlorobenzoic acid (see p-Chlorobenzoic acid)			
Paramethylphenylcinchonic acid (see Neocinchophen).			
Paranitrobenzoic acid (see p-Nitrobenzoic acid).			
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).			
Para-aminophenol (see p-Aminophenol).			
Parachlorophenol (see p-Chlorophenol).			
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).			
Para-anisidin (see p-Ansidine)			
Parachloraniline (see p-Chloraniline).			
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).			
Paracresol (see p-Cresol).			
Paradibromobenzene (see p-Dibromobenzene).			
Paradichlorobenzene (see p-Dichlorobenzene).			
Para toner, red, bbls	lb.	1.30 -	—
Chlorinated, kgs.	lb.	1.41 -	—
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy.	lb.	.0655-	.0660
fully refd., 122°-124°F., ASTM,	lb.	.0765-	—
125°-127°F., ASTM, tanks, refy.	lb.	.0765-	—
130°-132°F., ASTM, tanks, refy.	lb.	.0765-	—
132°-134° F., ASTM, tanks, refy.	lb.	.0765-	—
135°-137°F., ASTM, tanks, refy.	lb.	.0765-	—
AMP temperatures are an arbitrary 3°F higher than ASTM.			
Paraffin oil, pale, 100-110 vis., at 100°F., tanks e a s t	gal.	.14 -	—
refy			
Paraffin wax (see Paraffin)			
Paraformaldehyde 91% flake, bgs., c.l., frt alld	lb.	.10	—
bgs., l.c.l. frt alld	lb.	.12	.13
91%, powd., bgs., c.l., ex whse	lb.	.1715	—
bgs. l.c.l. ex whse	lb.	.1865	—
Paraformaldehyde, USP-X, fib. dms., c.l	lb.	.19 -	—
fib dms. 1,000-lb lots	lb.	.20	—
fib dms., smaller lots	lb.	.21¼ -	—
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. E	lb.	.14 -	—
55-gal. dms., l.c.l., divd. E	lb.	.15½ -	—
tanks, divd. E	lb.	.11½ -	—
Paranitroaniline (see p-Nitroaniline).			
Paranitrochlorobenzene (see p-Nitrochlorobenzene).			
Paranitrotoluene (see p-Nitrotoluene).			
Paranitrophenol (see p-Nitrophenol).			
Paraphenetidine (see p-Phenetidine).			
Paraphenylenediamine (see p-Phenylenediamine).			
Paraphenylphenol (see p-Phenylphenol).			
Para-tertiary-amylphenol (see p-tert-Amylphenol).			
Para-tertiary butylphenol (see p-tert-Butylphenol).			
Parathion ethyl, dms, frt alld	lb.	.84	—
Parathion prices 2c. per lb higher in West.			
Paratoluenesulfonamide (see p-Toluenesulfonamide).			
Passion flower herb, bls	lb.	.35	.40
Patchouli oil, imp., cns.	lb.	5.60	6.50
Peach kernel oil, USP (see Apricot kernel oil).			
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., divd E of Rockies	lb	1.00	—
Peacock blue price 1c higher W of Rockies.			
Peanut meal, old process 45% bgs., f.o.b., mills	ton.	69.00	Nom.
solvent, same basis	ton.	66.00	Nom.
Peanut oil crude, tanks, t.o.b. mills	lb.	.15½ -	—
Refd., dms.	lb.	.20½ -	.20¾
tanks	lb.	.18½ -	—
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt pt	kilo.	4.52	—
Pelargonic acid, dms., c.l., divd. E	lb.	.27½ -	—
ton lots, same basis	lb.	.28½ -	—
tanks, same basis	lb.	.25 -	—
Penicillin, potassium, cryst., bulk, 1,000,000 units		.018 -	—
Penicillin, procaine cryst., bulk, 1,000,000 units		.020 -	—
Pennyroyal oil USP imported, cns.	lb.	2.35 -	2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald	lb.	.21 -	—
bgs., less than ton-lots, same basis.	lb.	.29 -	—
bgs., c.l., t.l., 2,000 lb. minimum, same basis	lb.	.22½ -	—
Pentachlorophenol in dms. 1c. higher.			
Pentaerythritol tech., bgs., c.l., divd	lb.	.29 -	—
bgs., l.c.l., divd	lb.	.30 -	—
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).			
Pentane, indust, tanks, f.o.b. refy.	gal.	.14 -	—
Pentobarbital, dms., 100 lbs. or more	lb.	6.00 -	—
Pepper, black, Malabar, bgs	lb.	.45½ -	—
Lampong, bgs.	lb.	.45½ -	—
Red, Funtuas bgs.	lb.	.33 -	—
Japanese Hontoka, bgs.	lb.	.37½ -	—
Santaka, bgs.	lb.	.31½ -	—
Sudanese, bgs	lb.	.36 -	—
White, Muntok, bgs	lb.	.55 -	—
Peppermint leaves, dom., USP, bls., dms	lb.	No stocks.	
imp., USP, dms.	lb.	.85 -	.90
Peppermint oil, nat., dms	lb.	4.40 -	—
Redist., USP, dms.	lb.	4.65 -	—
Perchloroethylene dms, c.l., or t.l., divd	lb.	.13½ -	—
dms., l.c.l., divd.	lb.	.15¼ -	—
tanks, divd	lb.	.11¼ -	—
tanktruck, 1,000 gal. min divd	lb	12¼ -	—
Peri acid, dry bbls., frt. alld	lb	1.60	—
Paste, bbls. frt alld	lb	1.55	—
Peru balsam, dms	lb	1.15 -	1.50
Persic oil, USP (see Apricot kernel oil).			
Petitgrain oil South American, cns., dms	lb.	2.30 -	—
Petrolatum, NF, cream, dms., c.l., refy	lb.	.085 -	.08625
dms., l.c.l., divd	lb.	.11125-	.11250
tanks, refy	lb.	.0625-	.06375
NF, extra amber, dms., c.l., refy.	lb.	.07625-	—
dms., l.c.l., divd	lb.	.1025-	—
tanks, refy.	lb.	.05375-	—
NF, soft yellow, dms., c.l., refy	lb.	.07625-	—
dms., l.c.l., divd	lb.	.1025-	—
tanks, refy.	lb.	.05375-	—
USP, lily white, dms., c.l., refy.	lb.	.09125-	.09675
dms., l.c.l., divd	lb.	.1175-	.1225
tanks, refy.	lb.	.0 875-	—
USP, snow white, dms., c.l., refy.	lb.	.09625-	—
dms., l.c.l., divd	lb.	.1225-	—
tanks, refy.	lb.	.07375-	—
Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.			
Petroleum pitch (see Asphalt, petroleum).			

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l. works	lb.	.16¼ -	.18¾
non-ret. dms., l.c.l., works	lb.	.17½ -	.19
tanks, works	lb.	.14½ -	.17
50-55% sulfuric content, non-ret. dms., c.l., works	lb.	.16 -	—
non-ret. dms., l.c.l., works	lb.	.17 -	—
tanks, works	lb.	.13 -	—
o-Phenetidine, dms., c.l., frt. alld., E	lb	.91 -	—
dms., l.c.l., same basis	lb.	.93 -	—
p-Phenetidine, dms., c.l., frt. alld.	lb	1.05 -	—
dms. same basis	lb	1.08 -	—
Phenobarbitol, USP, dms., 100-lbs., frt. alld	lb.	3.25 -	—
Phenobarbital-Sodium (see sodium phenobarbital)			
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies	lb.	.17¼ -	—
non-ret. dms., l.c.l., same basis.	lb.	.18¼ -	—
tanks, same basis	lb.	.15¼ -	—
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis	lb.	.17 -	—
non-ret. dms., l.c.l., same basis.	lb.	.18 -	—
tanks, same basis	lb.	.15 -	—
39°C., or above, tar dist., non-ret. dms., c.l., same basis	lb.	.18½ -	—
non-ret. dms., l.c.l.	lb.	.19½ -	—
tanks, same basis	lb.	.16½ -	—
Phenol, USP, syn., dms., c.l., t.l., frt. alld	lb.	.19 -	—
dms., l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.17 -	—
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld	lb.	1.30 -	—
250-lb dm., same basis	lb	1.35 -	—
Phenothiazine drench, fib dms., t.l., divd	lb.	.46 -	—
fib. dms., ton lots, divd	lb.	.49 -	—
NF, fib. dms., t.l., divd	lb.	.45 -	—
fib. dms., ton lots, divd	lb.	.48 -	—
Phenyl acetate, dms, 100-lb. lots, works	lb.	.50 -	—
Phenyl salicylate (see Salol)			
Phenylacetaldehyde, soln., 50%, bots.	lb.	2.15	2.35
100%, bots.	lb.	3.80	4.00
Phenylacetic acid, pure, cryst., cns.	lb.	1.25 -	1.70
dl-Phenylalanine, dms., 1-kilo	kilo.	65.00 -	—
1-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb. lots, divd. E	lb.	3.45 -	—
fib dms., smaller lots, divd. E	lb.	3.80 -	—
N-Phenyldiethanolamine, dms., c.l., divd E	lb.	.50 -	—
dms., l.c.l., divd. E	lb.	.51½ -	—
tanks, divd. E	lb.	.47½ -	—
m-Phenylenediamine, dms., c.l., t.l., frt. alld	lb.	1.08 -	—
l.c.l., l.t.l., same basis	lb.	1.10 -	—
o-Phenylenediamine, comi, fib. dms, 100 to 1,000 lbs., works	lb.	1.70 -	1.80
p-Phenylenediamine, tech., dms, works	lb.	1.55 -	—
Phenylethanolamine, dms., c.l., works	lb.	.75½ -	—
dms., l.c.l., same basis	lb.	.76¼ -	—
Phenylethyl acetate bots.	lb.	1.25	1.40
2-Phenylethyl alcohol, extra, dms.	lb.	1.14	1.50
Standard, dms	lb.	1.10	1.60
b-Phenylethylamine dms., 20,000 lbs. or more, frt. alld	lb.	1.50 -	—
dms. smaller lots, frt alld	lb.	1.70	1.85
Phenylethylphenyl acetate, bots	lb	4.00	4.25
Phenylglyconic acid (see Mendelic acid).			
Phenylhydrazine 97% 450-lb dms.	lb.	1.45 -	—
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb lots, divd E	lb.	1.80 -	—
fib dms., smaller lots, divd E	lb.	2.10 -	—
o-Phenylphenol dms., l.c.l., works.	lb.	.48 -	.50
p-Phenylphenol, bgs. c.l., works	lb.	.38½ -	—
bgs., l.c.l., works	lb.	.43 -	—
Philippine copal gum, pale, chips, bgs	lb.	.23¼ -	.27
nubs, bgs.	lb.	.33¼ -	.37
seeds, bgs.	lb.	.20	Nom.
sorts, bgs.	lb.	.20	.24
Phloroglucinol, coml., fib dms., works	lb	6.40 -	—
CP, bots., works	lb.	17.75 -	—
Tech., fib dms. works	lb.	10.45 -	—
Phloxin red toner (see Eosin red toner).			
Phosgene, ret cyls. works	lb.	.15½ -	—
Phosphate defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports New Orleans	ton.	46.50 -	—
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, short-ton.		4.989	5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton.		5.849	5.858
70-72%, b.p.l. bulk, c.l., same basis short-ton.		6.429	6.438
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 74-75%, b.p.l., bulk, c.l., same basis, short ton.		7.329 -	7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton.		8.219	8.228
Above Florida prices are based on fuel oil at 2.52 per bbl and labor at $1.64.			
Phosphoric acid, food grade, 75%, cbys. c.l., works, E., frt. equald 100 lbs.		7.00 -	—
cbys., l.c.l., same basis 100 lbs.		7.25	7.75
tanks, t.w., works 100 lbs.		5.60 -	—
80% cbys., c.l. frt equald 100 lbs.		7.85	—
cbys., l.c.l., works 100 lbs.		8.10	9.35
tanks, t.w., works 100 lbs.		6.00	—
NF 85% cbys., c.l., works. 100 lbs.		8.50	—
cbys., l.c.l., works 100 lbs.		8.75	9.00
tanks, t.w., works 100 lbs.		6.65	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.55 -	—
dms., smaller lots, works	lb.	.56 -	.57
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
dms. l.c.l. works, frt. equald	lb.	.21½ -	—
tanks, works, frt equald	lb.	.19 -	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14 -	—
dms., l.c.l., works	lb.	.15 -	—
tanks, works frt equald	lb.	.12½ -	—
Phosphorus pentasulfide, powd., dms., c.l., works	lb.	.13½ -	—
dms. l.c.l. works	lb.	.14½ -	.15½
Solid, dms., c.l., works	lb.	.11½ -	—
dms. l.c.l., works	lb.	.12½ -	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1375-	.1475
dms., l.c.l., works	lb.	.1475-	.1675
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.35 -	—
dms., l.c.l., works	lb.	.39 -	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14 -	—
dms., l.c.l., works	lb.	.15 -	—
tanks, works	lb.	.12½ -	—
Phthalic anhydride bgs., c.l., works, frt. equald	lb.	.20 -	—
bgs., l.c.l., same basis	lb.	.21 -	—
tanks, same bsais	lb.	.19½ -	—
Phthalimide, 97-98%, dms., frt. alld	lb.	.65 -	—
Phthalocyanine blue, full strength, bbls, divd. E. of Rockies.	lb.	2.90 -	—
Resinated, bbls., same basis	lb.	2.75 -	—
Water dispersable, bbls., same basis	lb.	1.52 -	—
Phthalocyanine blue prices 1c. higher W. of Rockies.			
Phthalocyanine green toner, bbls., works	lb.	3.35 -	—
Resinated, bbls	lb.	3.00 -	—
Water dispersable, bbls.	lb.	1.71 -	—
Phthalocyanine green prices 1c. higher W of Rockies			
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more	lb.	5.00 -	—
NF fib dms	lb.	5.20 -	—
a-Picoline, dms. c.l., works, frt. equald	lb.	.46 -	.48
dms., l.c.l., works, frt. equald	lb.	.46½ -	.49
tanks, same basis	lb.	.43 -	.46
b-Picoline 98% dms., t.l., works.	lb.	1.05 -	—
dms., l.c.l., same basis	lb.	1.15 -	—
tanks, same basis	lb.	.95 -	—
b,g-Picoline 5°C dms., c.l., works.	lb.	.32½ -	—
dms. l.c.l. works	lb.	.33 -	—
g-Picoline, dms., t.o.b., works	lb.	1.60 -	—
tanks, t.l. same basis	lb.	1.50 -	—
Picric acid, NF bbls.	lb.	.85 -	—
Tech., bbls.	lb.	.50 -	—
Pigment green B, kgs	lb.	1.55 -	—
Pilocarpine hydrochloride, USP, bots	oz.	4.75 -	5.25
Pilocarpine nitrate, USP bots., vials.	oz.	4.65 -	5.15
Pimento, Jamaican, bgs	lb.	.68¾ -	—
Mexican, bgs	lb.	.56 -	—
Pimento berry oil, NF, dms.	lb.	3.75	9.25
Pimento leaf oil, crude, cns	lb.	2.50 -	2.60
Pine oil, dest.-dist., dms., works	lb.	.18 -	—
dms., l.c.l. ex whse, New York.	lb.	.173 -	—
Steam-dist. dms. ex whse., New York	lb.	.185 -	—
dms., divd	lb.	.188 -	—
Pineneedle oil, Siberian (see Abies Siberica oil).			
Pink root, bls.	lb.	2.25 -	—
Piperazine, anhyd., dms. c.l., frt. alld. E	lb.	1.80 -	—
dms., l.c.l., frt. alld. E	lb.	1.85 -	—
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld	lb.	1.33 -	—
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld	lb.	1.29 -	—
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.90 -	—
dms., 200-900 lbs., frt. alld	lb.	.93 -	—
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld	lb.	1.11 -	—
Piperidine, dist., 98% min., 5 dms. or more, l.c.l., l.t.l., f.o.b. works	lb.	2.65 -	—
1-4 dms., same basis	lb	2.70 -	—
dms., c.l., t.l., frt. equald	lb.	2.55 -	—
Piperonyl butoxide, dms., divd. E.	lb.	4.50	5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works	oz.	81.00	85.00
Pleurisy root, bls.	lb.	.45	.50
Podophyllum resin, NF, dms	lb.	12.50	15.50
Poke root, bls.	lb.	.19	.22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units.		.52 -	—
bulk, bots., 25-50 billion units. 1,000,000 units.		.54 -	—
bulk, bots., 1-25 billion units. 1,000,000 units.		.56 -	—
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb.	.42 -	—
dms., 10,000-20,000-lb lots, works.	lb.	.44 -	—
dms. smaller lots, works	lb.	.47	.49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works	lb.	.42	—
dms., 10,000-20,000-lb. lots, works	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Pontianak copal gum, chips, bgs	lb.	.23½ -	.26
Nubs, bgs.	lb.	.38	.44
Poppy seed, Argentine, bgs.	lb.	No stocks.	
Dutch, bgs.	lb.	.14 -	—
Danish, bgs.	lb.	.14 -	—
Polish, bgs.	lb.	.13 -	—
Turkish, bgs.	lb.	.11 -	—
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs		4.25 -	—
dms., l.c.l., same basis 100 lbs		5.25 -	—
tanks, same basis 100 lbs		3.70 -	—
reg., flake, 88-92% dms. c.l. same basis 100 lbs.		9.55 -	—
dms., l.c.l., same basis. 100 lbs.		11.05 -	—
solid, 88-92% dms., c.l., works 100 lbs.		9.10 -	—
dms. l.c.l., works 100 lbs.		10.60 -	—
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E	lb.	.31 -	—
Potassium bicarbonate, USP, gran. dms	lb.	.22 -	—
powd., dms	lb.	.24 -	—
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18 -	—
bgs. l.c.l., works	lb.	.18½	.19¾
Potassium bichromate in dms. ¾c. higher.			
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald	lb.	.37 -	—
100-lb bgs., 5,000 lbs. 1 shipt., same basis	lb.	.38 -	—
100-lb bgs. smaller lots, same basis	lb.	.40 -	—
Potassium borohydride, powd., dms., works	lb.	16.00	22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots			
Potassium bromate, 200-lb. dms., c.l., frt. alld	lb.	.49 -	—
Potassium bromide, USP gran., bbls., kgs	lb.	.39	.40
Potassium carbonate, dom., NF, gran., bbls., dms	lb.	.22 -	.24
Dom. tech. powd., bbls., dms	lb.	.21 -	.22
Dom. calcinated, bgs., c.l. works. 100 lbs.		8.50 -	—
bgs., l.c.l., same basis 100 lbs.		9.55 -	—
Dom. hydrated, 83-85%, bgs., c.l., works 100 lbs.		7.10 -	—
bgs., l.c.l., works 100 lbs.		8.15 -	—
Potassium chlorate, cryst, dms., c.l., works	lb.	.12¼ -	—
dms., l.c.l., works	lb.	.13½ -	.14½
Powd., dms., c.l., works	lb.	.12¾ -	—
dms. l.c.l., works	lb.	.14 -	.15
works	lb.	.12¼ -	—
Potassium chlorate, NF, cryst., dms., 2,000 lbs or more,	lb.	.16¾ -	—
NF, gran., 25-lb metal dms	lb.	.36 -	—
NF powd., dms., 2,000 lbs. or more, works	lb.	.17¼ -	—
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works	ton	29.00 -	—
bgs., c.l., works	ton	30 -	—
99.3% KCL, bulk, c.l., works.	ton.	28.00 -	—
bgs., c.l., works	lb.	33.00 -	—
USP, cryst., dms	lb.	.17 -	—
Potassium chloride, USP, gran., dms	lb.	.21 -	.23
USP, powd., dms.	lb.	.24	.26
Potassium chloride agricultural (see Potassium muriate).			
Potassium chromate, tech., dms., works	lb.	.50	.51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E	lb.	.43 -	—
powd. 250-lb dms., same basis.	lb.	.46 -	—
Potassium cyanide, dms., 20,000-lb. lots or more, works	lb.	.42½ -	—
dms. 2,000-19,999-lb. lots, works.	lb.	.43	—
dms., smaller lots, works	lb.	44	.44½
Potassium dichromate (see Potassium bichromate).			
Potassium ferricyanide, dms., ton lots, works	lb.	.50 -	—
dms., smaller lots works	lb.	.65 -	—
Potassium ferrocyanide, dms., ton lots	lb.	.24½ -	—
dms. smaller lots	lb.	.29 -	—
Potassium fluoborate, fib dms., c.l., works	lb.	.30 -	—
fib dms., l.c.l., works	lb.	.31 -	—
Potassium fluoride, dms., works	lb.	.36 -	.37
Potassium gluconate, 100-lb dm., f.o.b. works E	lb.	1.07 -	—
Potassium guaiacol sulfonate, NF, dms	lb	2.10	2.30
Potassium hydroxide, tech. (see Potash caustic).			
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots	lb	.33½ -	.38
Potassium hypophosphite, NF fib. dms., 1,000-lb. lots	lb.	1.38 -	—
Potassium iodide, USP cryst., gran., 250-lb. dm., f.o.b. works, ½	lb.	1.56 -	—
Potassium manure salt, min. 20% K2O, bulk, c.l., works. unit-ton		.17 -	.1765
Potassium metabisulfite, gran. dms.,	lb.	16 -	—
Powd., dms.	lb.	.27 -	—

Potassium muriate, standard, bulk, c.i., works unit-ton. .37½- .39½
bagged 60% minimum K_2O, same basis ton.26.60- 27.80
Gran., bulk, c.i., works unit-ton. .38½- .40½
bagged, 60% minimum K_2O, same basis ton.28.10 -30.10

Inside prices apply to material contracted for prior to July 1, 1960.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 —
bbls., smaller lots 100 lbs.18.00 -19.00
gran., bgs., 20-ton lots 100 lbs. 9.50 —
bgs., smaller lots 100 lbs.11.00 -12.00
powd., bgs., 20-ton lots 100 lbs.10.50 —
bgs., smaller lots 100 lbs.12.00 -13.00

Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 · —

Potassium pentaborate, gran., dms., c.l. works ton.219.50 · —
dms., ton lots, ex whse 100 lbs.17.48 · —
dms., smaller lots, ex whse 100 lbs.18.73 · —

Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 .20

Potassium permanganate, coml., kgs., works lb. .25 .33
USP dms., works lb. .29 .35

Potassium pyrophosphate, tetrabasic, dms., works lb. .1473- 1575

Potassium prussiate red (see Potassium ferrocyanide).

Potassium prussiate yellow (see Potassium ferro-cyanide).

Potassium silicate, electrical grade, 39° Be. 1.2.0, dms., c.l., works 100 lbs. 6.50 · —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 7.65
tanks, works 100 lbs. 6.15 · —
40.5° Be 1:2.1, dms., c.l., works. 100 lbs. 5.95 · —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 · —
tanks, works 100 lbs. 5.60 · —
glass grade, bgs., c.l., works. 100 lbs.17.30 -18.00
bgs., l.c.l., works 100 lbs.17.80 · —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 · —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 · —
tanks, works 100 lbs. 4.60 · —

Potassium silicofluoride, bgs., works. lb. .09½- .10

Potassium silicofluoride in drums, 0.4c. per lb higher.

Potassium stannate, dms., frt. alld. lb. .895 · —

Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works unit-ton. .70½- .72½

Inside price applies to tonnage contracted for prior to July 1, 1960.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate NF VII, cryst., dms., lb. .31 .33
NF VII, gran., 400-lb. dm lb. .18 · —
NF VII, powd., 400-lb dm lb. .17 · —

Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).

Potassium thiocyanate, NF, cryst., dms., works lb. .96 .98
Tech., dms., works lb. .77 .79

Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —

Potassium-magnesium sulfate, bags 40% K_2SO_4 and 18% MgO, bulk works, base price. ton.13.45 · —
bulk, works, July forward ton.14.00 · —

Potassium-sodium tartrate, NF gran. or powd., 250-lb. dms., c.l., works E lb. .42½- —
250-lb dms., 5,000-lb. lots, same basis lb. .43 · —
250-lb. dms., same basis lb. .43½- —

Potassium-titanium fluoride, fib. dms., works lb. .39 .40

Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 · —
fib. dms., l.c.l., works lb. .52½- .55

Pregnenolone, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.

Procaine hydrochloride, USP antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 · —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb 2.40 · —
dms., 500 lbs lb. 2.45 · —
dms., 100 lbs lb. 2.50 —

Progesterone, USP bots gram No prices.
Pregnenolone acetate bots gram No prices.
Propenyl guaethol dms lb.24.30 -27.00

b-Propriolactone tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., t.l., same basis lb. .48½- —
tanks, same basis lb. .45 · —

Propionic acid syn. pure, dms., c.l., dlvd lb. .23¼- —
dms., l.c.l., dlvd. lb. .24¾- —
tanks, dlvd lb. .20¾- —

n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .16¼- —
tanks, dlvd lb. .12¼- —

n-Propyl alcohol, dms., c.l., dlvd lb. .14 .15
dms., l.c.l., dlvd lb. .15½- .16½
tanks, dlvd lb. .11½- .12½

n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 4.40

n-Propyl-p-hyroxybenzoate, USP, dms lb. 2.30 · 2.40

Propyl thiouracil bots., 50 kilo lots or more kilo.55.00 —
bots., smaller lots kilo.55.10 -55.30

n-Propylamine, dms., c.l., dlvd lb. 1.24 —
dms., l.c.l., same basis lb. 1.255 · —

n-Propylene dichloride, consumers', dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0905- —
tanks, same basis lb. .07 · —

Propylene dichloride prices in West 1c. higher, same basis.

Propylene glycol, indust., dms., c.l., dlvd. E lb. .15 · —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., dlvd. E lb. .17 · —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .14½- —

Propylene glycol methyl ether, dms., c.l., dlvd lb. .30 · —
dms., l.c.l., same basis lb. .31 · —
tanks, same basis lb. .18½- —

Propylene oxide, dms., c.l., dlvd. E. lb. .17 · —
dms., l.c.l., dlvd. E lb. .18¼- —
tanks, dlvd. E lb. .14½- —

Psyllium seed, black, bgs lb. .42 · .45
Blonde bgs. lb. .18 · .20
Husks, bgs. lb. .42 · .45

Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04½
bgs., smaller lots lb. .03½- —
Imp., Italian, silk-screen, coarse, bgs, ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 · —
sun dried, coarse, bgs. ton.60.00 · —
fine, bgs. ton.60.00 -70.00

Pumpkin seed, bgs. lb. .25 · .26

Pyrethrins, syn. (see Allethrin).

Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 · —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 · —

Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 · 9.80
100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90

Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purif, 20%, dms., works lb.11.00 -11.35

Pyridine, denat., dms. c.l., works and frt. equald gal. 2.77 · —
dms., l.c.l., same basis gal. 2.80 · —
Refd., 2°, non-ret. dms., c.l., same basis lb. .75½- —
dms., l.c.l., same basis lb. .76 · .76½
tanks, same basis lb. .71 · —

Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 .21

Pyridoxine hydrochloride, USP 500-gram bots., dms., f.o.b. works kilo.95.00 -100.00

Pyrites, Canadian, 48-50% S, mines, long-ton. 4.50 · 5.00

Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 · —
Pyrogallol, NF, 100-lb. dms. lb. 3.50 · —
Pyroxylin, USP, bots lb. 9.50 · —

Q

Quassia chips lb. .10 · —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 1.75 · 2.00
Quinidine sulfate, USP, 1,000-oz. dm oz. .78½- —
Quinine, NF, 1,000-oz. dm. oz. .3750- —
Quinine bisulfate USP, 1,000-oz. dm. oz. .38 · —
Quinine hydrochloride, 1,000-oz dm. oz. .3650- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .3150- —
Quinoline, dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 · —

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis lb. .98 · —
Powd., dms., c.l., t.l., frt. alld., 100% basis lb. 1.03 · —
Rapeseed oil, dms. lb. .19 · .19½
tanks lb. .17½- —
Rare earth oxalate, NF, 45-50%, bgs. works lb. 1.15 · —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 · 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

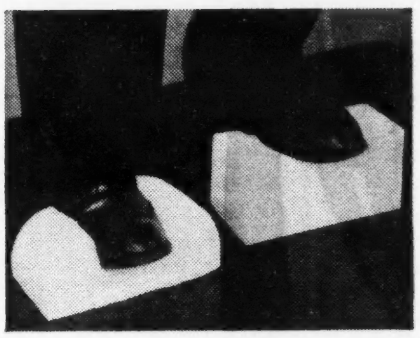
Red precipitate (see Mercuric oxide, red).
Red toner Lake C, alizanine, bbls., works lb 1.30 · —
Reserpine, cryst. bots gram 1.25 · —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald lb 77½- —
bgs., l.c.l., same basis lb 78½- —
Resorcinol in dms, 1c per lb more
USP, powd., dms., works lb 2.95 —
Resorcinol monoacetate, NF dms. lb. 2.50 —
Rhatany root, bgs lb .14 .18
Rhodamine red toner, molybdated, PMA, kgs., works lb 6.00 —
Tungstated, PTMA works, kgs lb 6.60 —
Rhodinol, 5-lb cans lb.42.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 —
powd., bgs. lb. .35 · —
Riboflavin, USP fib. dms., kilo or more, dlvd kilo.36.00 · —
Riboflavin, 5-phosphate-sodium fib dms, kilo or more, dlvd. kilo.104.70 · —
Rice bran oil, clarified, dms., t.c.i. lb. .15½- —
tanks, dlvd. E lb. .14 · —

RED PIGMENTS

Red pigment quotations are listed individually For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

HARDWORKING JEFFERSON CHEMICALS

POLYETHERS and CATALYSTS



First step to better urethane foams...

TIGHT SPECIFICATION CHEMICALS

	PPG-2000	TRIOL G-1500	TRIOL G-3000	TRIOL G-4000
Specific gravity, 20/20°C	1.003 min. 1.006 max.	—	—	—
Volatility, wt.%	0.2 max.	0.2 max.	0.2 max.	0.2 max.
Hydroxyl number, mg. KOH/g	54.5 min. 57.5 max.	107 min. 118 max.	53.4 min. 59.0 max.	39 min. 43 max.
Acid number, mg. KOH/g	0.1 max.	0.2 max.	0.2 max.	0.2 max.
pH in 10:1 methanol-water solvent	5.0 min. 7.0 max.	—	5.0 min. 7.0 max.	5.0 min. 7.0 max.
pH in 10:6 isopropanol-water solvent	— —	3.5 min. 5.5 max.	— —	— —
Total unsaturation, meq./g	0.04 max.	0.03 max.	0.04 max.	0.075 max.
Gel test, flow time, sec	10 max.	—	10 max.	10 max.
Potassium, ppm	10 max.	10 max.	10 max.	10 max.
Water at shipment, wt.%	0.1 max.	0.1 max.	0.1 max.	0.1 max.
Ash, wt.%	0.005 max.	0.005 max.	0.005 max.	0.005 max.
Color, Pt-Co	50 max.	100 max.	100 max.	100 max.
Appearance		Clear and substantially free of foreign matter.		

Jefferson is currently offering four polyethers which have proved most satisfactory for urethane technology . . . Polypropylene Glycol 2000, Triol G-1500, Triol G-3000, and Triol G-4000. The triols are propylene oxide adducts of glycerine; the number indicates the average molecular weight. All are made to rigid urethane specifications with emphasis on low unsaturation, low water content, low ash, low acid numbers, and controlled pH.

Jefferson is also your best source for N-methylmorpholine, N-ethylmorpholine and N,N'-dimethylpiperazine, which are excellent catalysts for urethane foams. Other interesting tertiary amine catalysts and polyethers for rigid foams are under development . . . watch for their announcement soon.

We will be pleased to send samples of our present polyethers and catalysts for your evaluation . . . write or call Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

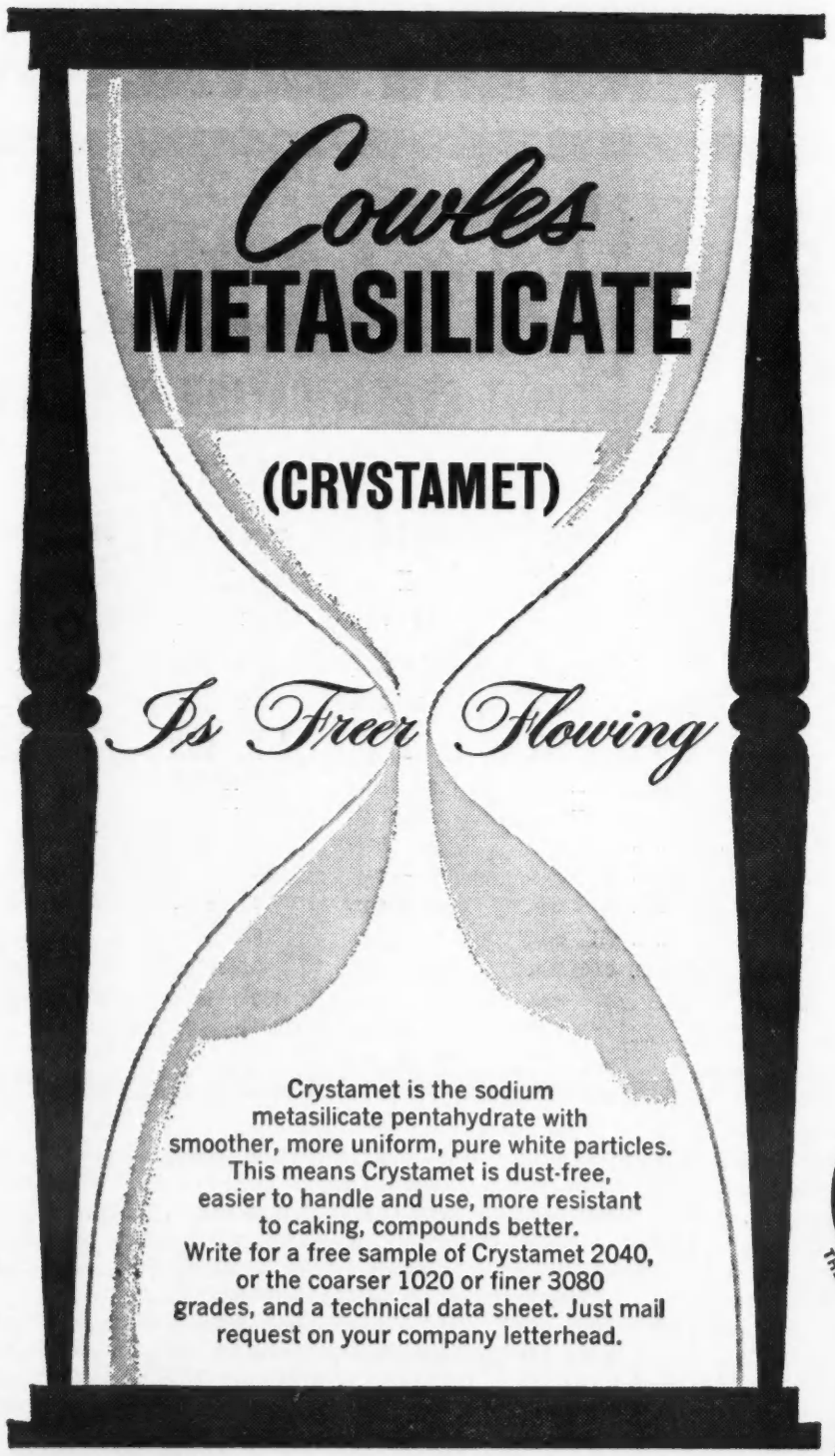
HOUSTON • NEW YORK • CHICAGO • CLEVELAND
CHARLOTTE • LOS ANGELES • SAN FRANCISCO

JEFFERSON CHEMICALS

Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots., otto lb.600.00 -700.00
absolute lb.145.00 - —
Rosemary oil, Spanish, NF, cns., dms lb. .97 1.40
Spanish, tech., cns., dms lb. .80 - .95
Rosin gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib dms., works unit-lb. .10½- —
Resin, 25-45% fib dms, works, unit-lb. .10½- —
Rottenstone, bgs, 5-ton lots, ex-whse lb. .03¾- —
bgs, ton lots, same basis lb. .04¼- —
Rubber solvent petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Rue oil, bots lb 2.75 3.00
Rutin, NF fib dms, 10 kilo lots, kilo.11.00 - —
fib, dms., 5 kilo lots kilo.11.50 - —
fib, dms., 1 kilo kilo.13.00 - —
Ryania, 100% powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib, dms., 1,000-lb lots, works lb. 2.50 - —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb. 1.50 - —
dms., smaller lots lb. 1.60 - —
USP, powd., soluble, dms., 1,000-lb. lots lb. 1.55 - —
dms., smaller lots lb. 1.65 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.53 - —
dms., smaller lots lb. 1.63 - —
Safflower oil, dms., New York lb. .1815- .1840
tanks, Atl. coast lb. .1620- .1645
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms. lb. .65 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb.12.00 -15.00
Dalmatian, cns. lb. 2.85 3.25
Spanish, cns lb 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb 1.23 - —
dms, l.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid tech., fib, dms., c.l., t.l., dlvd lb. .40½- —
fib dms, l.c.l. dlvd lb. .44¾- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¾- —
200-lb fib dms., less than 1,000 lbs lb. .54¾- —
Cryst., 100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs. lb. .56¾- —
Salicylic acid, USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .52¾- —
100-lb. fib. dms., less than 1,000 lbs. lb. .61¾- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom. bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, E. Indian, chips, bgs., lb. .55 - .66
powd, fib dms lb. .75 - .76
Sandalwood oil, cns. lb.26.00 -30.00
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 —
lb. No stocks.
Sassafras oil, artif., dms lb. .45 - —
Nat., dom., dms lb. 1.40 - —
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd, bgs. frt alld. 100% basis. lb. .93 - —
Scopolamine hydrobromide, USP, bots oz.13.00 - —
Sebacic acid, CP bgs., c.l., works lb. .59½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs. c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .33
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls. lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings lb. .16 - —
Senna leaves, Tinnevelly, No. 1, bls. lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs. lb. .17 - —
Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms., l.c.l. lb. .37 - .38
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
dms., l.c.l., works lb. .22 - .30½
bbls., 1,500-lb. lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd, bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 .39
lemon No. 2, bgs., 10-bg. lots. lb. .34 .37
superfine, bgs., 10-bg. lots lb. .32 .34
Shellac in 1 to 10-bg. lots 1c per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 —
dms., l.c.l., works gal. .48 —
tanks, works gal. .25 —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 —
bgs, l.c.l. works, ex whse ton.45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½%, 140 mesh, bgs., c.l. works ton.15.00 - —
bgs., l.c.l. works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, bots, 1,000-oz lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots. 250-500 oz., same basis. oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls. lb. .35 - —
Powd., bls. lb. .40 - —
Whole, bls. lb. .25 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs. 5.20 - —
liq., 50% sellers tanks works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
Soda, caustic, liq, 73%, sellers' tanks, works, dry basis, 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis lb. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs, c.l. works. 100 lbs. 2.50 - —
bgs, smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd, E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF, 60%, gran., dms, c.l., works, lb. .15½- —
dms., l.c.l. works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs, c.l. dlvd, E lb. .27½- —
bgs., l.c.l., dlvd E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.35 - —
less than 100-kilos kilo. 6.60 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l. same basis lb. .39 - —
USP, dms., ton lots, same basis. lb. .43 - —
dms., 1,000-lb lots, same basis. lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb. higher.
Sodium bifluoride, fib, dms., c.l., works, frt. equald lb. .19½- —
fib, dms., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l. works, 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 3.60
dms., l.c.l., frt equald 100 lbs. 3.50 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls., c.l., works. 100 lbs. 1.70 - —
bbls, l.c.l. works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., c.l., works lb.19.90 —
dms., l.c.l., works lb.33.00 -40.00
stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).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METASILICATE
(CRYSTAMET)
Is Freer Flowing
Crystamet is the sodium metasilicate pentahydrate with smoother, more uniform, pure white particles. This means Crystamet is dust-free, easier to handle and use, more resistant to caking, compounds better. Write for a free sample of Crystamet 2040, or the coarser 1020 or finer 3080 grades, and a technical data sheet. Just mail request on your company letterhead.

Cowles CHEMICAL COMPANY
7018 Euclid Avenue · Cleveland 3, Ohio

Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech. dms., c.l., works lb. .58 - —
dms. 20-dm lots or more works lb .66 —
dms., smaller lots, works lb .70 .73
Sodium chloroacetate, tech. dms., c.l., works lb .27 —
dms., l.c.l., works lb .28 —
Sodium chromate, anhyd. fib dms., c.l., t.l., works lb. .14¾ —
fib dms. l.c.l. works lb .15¼ .16½
Tetrahydrate, bgs., c.l., t.l., works, lb. .1015- —
bgs. l.c.l. lb .1065- .119⅛
Sodium citrate anhyd. 200-lb dm., f.o.b works E lb .62 —
NF VIII gran. bgs. c.l. same basis lb .26 —
USP XIV gran. bgs. c.l., same basis lb .29 —
Sodium citrate USP powd prices ½c higher
Sodium cyanate dms. 1,000-lb lots, works lb .85 —
dms. smaller lots, works lb .90 1.10
Sodium cyanide, briquettes or gran., 97 percent min. dms., works 20,000-lb lots lb. .176 —
dms. same basis, 5,000 to 19,999-lb lots lb. .188 —
dms. same basis, 1,000 to 4,900-lb lots lb .198 —
Sodium cyclamate 100-lb dm. f.o.b. works lb 1.95 —
Sodium diacetate, anhyd. (9-41% acetic acid dms. c.l., works lb .18 —
250-lb dms. c.l., works lb .18¾ —
Tech. 33-35% acetic acid dms., t.c.l., works lb .15 —
250-lb dms. t.c.l. works lb. .15¾ —
Sodium dimethyl dithiocarbamate, 40% soln. dms c.l. t.l. frt alld., 100% basis lb 42 —
dms. t.c.l. t.t.l., same basis lb. .47 .52
tanks, same basis lb .38 —
Sodium ferrocyanide bgs. 10-ton lots lb .13½ —
bgs. smaller lots lb. .14¼ —
Sodium fluoride white, 97% fib. dms. c.l., works, frt. equald lb. .1390- —
fib dms. t.c.l. works, frt. equald lb .1465- —
Sodium formate bgs. c.l. works 100 lbs. 7.05 - —
bgs. t.c.l. ex whse 100 lbs 8.65 —
Sodium gentisate 100-lb fib dms lb 5.50 —
Sodium gluconate, refd., 250-lb dm. f.o.b works E. lb .64 —
tech. bgs. c.l. t.l., same basis lb .34 —
Sodium hydride 50% soln in oil, dms., works lb. 1.25 3.50
25% soln in oil, dms., 50 lbs or less f.o.b shipping point lb 2.20 —
dms. 50-99 lbs same basis lb 1.77 —
dms., 100-999 lbs., same basis lb 1.20 —
dms. 1,000 lbs or more, same basis lb .95 —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms c.l. frt alld lb 23½ —
dms. t.c.l. frt alld. lb. 25¾ —
Sodium hydroxide, NF, pellets, 100-lb dms. 1 to 100-dm lots. lb .23½ .26
Sodium hydroxide, tech. (see Soda caustic).
Sodium hypophosphite, NF, dms. 1,000-lb lots lb .99 —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb dms. f.o.b. works lb 2.13 —
Sodium lauryl sulfate, dms., c.l. dlvd lb .20½- —
dms., t.t.l., dlvd lb. .21½- —
tanks, dlvd lb 19½- —
Sodium lignin sulfonate, bgs., c.l. works 100 lbs 4.25 6.50
c.l. bgs. works 100 lbs 4.40 7.00
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate octahydrate gran. bgs. c.l. works 100 lbs 9.00 —
bgs., ton lots, ex whse 100 lbs 8.30 - —
bgs. smaller lots ex 100 lbs 9.61 -11.61
Tetrahydrate bgs c.l. works 100 lbs 9.00 —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs. smaller lots, ex 100 lbs. 16.08 -18.08
Sodium metallic, bricks, c.l. works lb .21 —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb .17 - —
Sodium metalinate bbls. frt alld. lb .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b shipping pt 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate anhyd., bgs. c.l., works 100 lbs 5.70 - —
bgs., 6,000-19,900 lb lots, works 100 lbs 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Pentahydrate, bgs., c.l., works. 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs 4.80 6.75
dms., l.c.l., works 100 lbs 4.95 —
dms., l.c.l., works 100 lbs 5.30 7.25
Sodium molybdate, anhyd., dms. works, frt. equald lb .92 .99
Cryst. dms. works frt alld lb .74 .76
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate, bbls. lb. .77 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l. works, frt. equald 100 lbs. 9.40 - —
bbls., l.c.l., same basis 100 lbs. 11.40 - —
Sodium orthosilicate, cone. dms. c.l., works 100 lbs 6.70 —
dms., l.c.l., works 100 lbs 7.05 7.85
Hydrated, flake, bbls. c.l. works 100 lbs 5.65 —
bbls. l.c.l. works 100 lbs 7.60 7.90
Sodium oxalate, 98% bgs. works 100 lbs 12.35 - —
99% bgs. works 100 lbs 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para aminosalicylate (see Sodium p-aminosalicylate)
Sodium pentachlorophenate briquets dms., c.l., works, frt equald lb. .26 —
dms. l.c.l. same basis lb .27½ .34
Pellets, dms., c.l., same basis lb. .26 —
dms. c.l. same basis lb .27½ .34
Powd. dms. c.l. same basis lb. .25 —
dms l.c.l same basis lb. .25½ .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb 6.00 - —

Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs. l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 .53
NF powd. dms lb. .55 .56
Sodium phosphate, dibasic, anhyd., bgs c.l. frt equald 100 lbs 8.10 —
bgs., l.c.l., same basis 100 lbs 8.50 9.55
Dibasic, cryst., bgs., c.l., t.l., frt. equald... 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs 5.15 5.90
Duohydrate, bgs., c.l., frt. equald 100 lbs. 7.75 - —
bgs., l.c.l., same basis 100 lbs. 8.25 —
Monobasic, anhyd. bgs. c.l. frt equald 100 lbs. 9.15 —
bgs., l.c.l., same basis 100 lbs 9.55 -10.15
Tribasic, anhyd. bgs c.l. frt equald 100 lbs. 9.15 —
bgs. t.c.l. frt. equald 100 lbs. 9.60 -10.20
Sodium phosphate in dms 60c to 80c. higher than bgs
Sodium phosphate, USP, dried, powd. bgs., dms., works lb .19 .20½
Sodium picramate, tech., paste, dms. f.o.b works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms. dlvd E of Rockies. lb. .37 - —
Prices W of Rockies 3c per lb more.

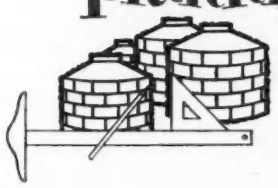
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l., works, frt equald. 100 lbs. 11.25 —
bgs., l.c.l., same basis 100 lbs. 12.00 -12.50
Sodium pyrophosphate, ferric, dms., c.l. t.l. works lb. .36 —
dms. l.c.l. works lb .37 .39
Tetrabasic, anhyd., bgs., c.l., works frt equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms. 1,000-lbs or more lb. 78½- —
dms. less than 1,000 lbs. dms. lb. 81½- —
Sodium sesquicarbonate bgs., c.l., works 100 lbs 2.35 —
l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd zone 2 100 lbs 4.35 4.60
dlvd zone 3 100 lbs 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60

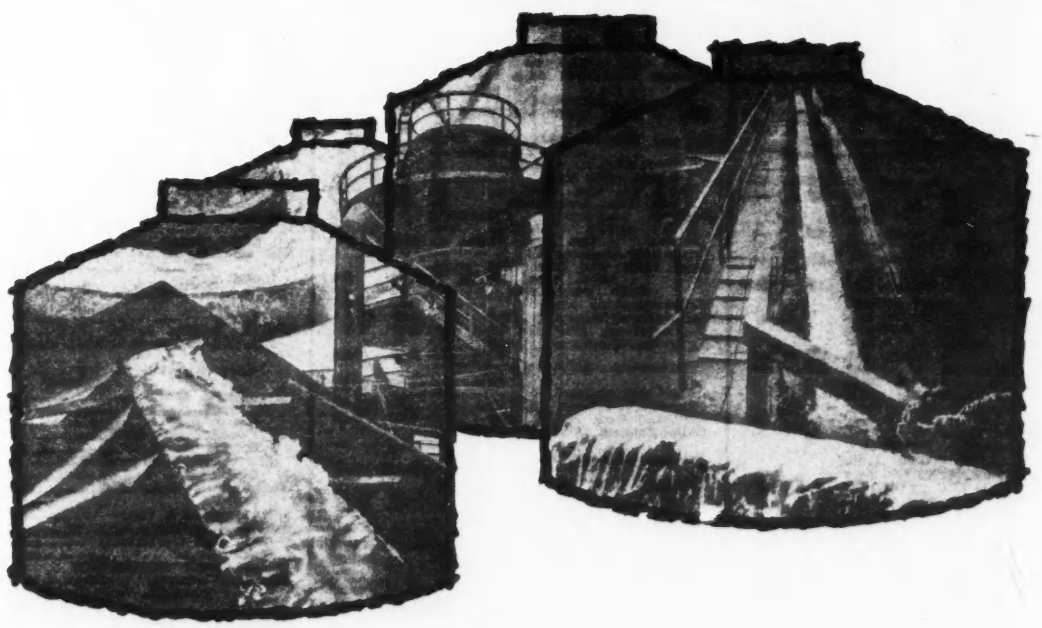
Sales zones are (1) Atl states E. of Miss. R and N of south bound of Ky. and Va., Ala., La. and Miss south of 31°; Tex E. of 100°; S of 31° Fla., also Me., N H and Vt in which there are special county zones: Davenport Ia., and St Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St Louis) Neb E. of 98° N C., S C., Tenn and Tex N of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark W of 98° Kan., Neb W. of 98° N D, Okla., S. D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah Wyo and El Paso Tex.

Sodium sesquisilicate anhyd., bgs. c.l. t.l works 100 lbs 5.70 —
dms c.l. t.l., works 100 lbs 6.20 —
hydrated, bgs., c.l., works. 100 lbs. 5.00 —
bgs. 6,000-19,900 lb lots works 100 lbs 5.35 —
dms., c.l., works 100 lbs 5.50 —
dms. 6,000-19,900 lb lots works 100 lbs 5.85 —
Sodium silicate, liq. 40° Be 1:3.2, turbid dms c.l works 100 lbs 1.65 —
dms., t.c.l. works 100 lbs 1.90 2.40
tanks works 100 lbs 1.20 —
47° Be 1:2.9 turbid, dms. c.l. works 100 lbs 2.25 —
dms., t.c.l. works 100 lbs 2.60 3.45
tanks, works 100 lbs 1.90 —
52° Be 1:2.4 turbid, dms. c.l., works 100 lbs 2.65 —
dms., t.c.l., works 100 lbs 3.00 3.50
tanks, works 100 lbs 2.30 —
Solid, 1:3.2 bgs. works ton 67.50 —
Sodium silicofluoride, bgs., c.l., works lb .065 —
bgs. t.c.l. works lb 725 —
Sodium silicofluoride in dms. 0.4c per lb. higher
Sodium stannate dms. works frt alld. E lb. .745 - —
Sodium sulfa drugs (see Sulfa name)
Sodium sulfanilate bbls. works lb .22 —

WEST END

advance planning OF ENLARGED SODIUM SULFATE STORAGE ANTICIPATES INDUSTRY'S GROWING NEEDS





WEST END as a major supplier of highest quality natural anhydrous sodium sulfate programs expansion of its in-plant storage to meet ever-increasing requirements of industry. West End is constantly exploring new solutions to transportation, distribution and handling problems to assure its continuing position as a reliable and economical source.

Stauffer CHEMICALS

WEST END CHEMICAL COMPANY • DIVISION OF STAUFFER CHEMICAL COMPANY

636 CALIFORNIA STREET, SAN FRANCISCO, CALIFORNIA • PLANT: WESTEND, CALIFORNIA

Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd, bgs, c.l. dlvd E, ton 56.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 38.00 - —
bulk, c.l., works ton 34.00 - —
USP cryst, fib dms lb 17½- .18
Sodium sulfhydrate, flake 70-72%, dms, c.l. works, frt. equald lb 07¼- —
dms., l.c.l. same basis lb 08¼- —
Liq. 40-44% tanks works, 100% basis ton 130.00 —
Sodium sulfide flake, dms., c.l., works E, frt equald lb 06 - —
dms, l.c.l., same basis lb 07 - —
Fused, bbls, c.l. works, E., frt. equald lb. 05½- —
bbls, l.c.l. same basis lb 06½- —
Sodium sulfite, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l. same basis 100 lbs 4.00 - —
Powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs, l.c.l. same basis 100 lbs 7.95 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works frt equald lb .04½- —
dms., l.c.l same basis lb. .05½- —
Sodium thiocyanate, purified, cryst., 250-lb dms lb. .90 - —
Tech. anhyd. dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate NF cryst. bbls. lb. .13½- —
Tech. anhyd. 100-lb bgs. c.l., t.l., frt. equald 100 lbs 7.75 - —
100-lb bgs l.c.l. t.l.l., frt. equald 100 lbs 8.15 - —
photograde, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb bgs. l.c.l. t.l.l. frt. equald lb .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., t.l.l., frt. equald 100 lbs 5.20 —
Sodium titanate, ctns. c.l. works. lb. 14¼ —
ctns. 5-ton lots, works lb. .14½ —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld E. lb. .35 —
50-lb dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l. frt alld E lb .42 —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - —
bulk, hopper cars, same basis, 100 lbs. 7.35 - —
Sodium trisilicate, powd., 1:3.2, bgs. c.l., works 100 lbs 8.95 —
bgs., t.c.l., works 100 lbs 9.70 -13.13
dms., c.l., works 100 lbs 9.45 —
dms., l.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech, kgs, dlvd. E lb 1.32 —
Sodium-ammonium phosphate, purif., cryst. dms. works lb 52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen sodium).
Sodium formaldehyde sulfoxylate dms., t.l., dlvd lb. 22½- —
dms., l.t.l., same basis lb. .23 - —
Sodium zirconyl sulfate, fib dms. 1,000-lb lots or more works lb .28 —
fib. dms., smaller lots, same basis lb .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal .30 .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360° F b.r., 14-16°C m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355° 420°F b.r., 17° 18°C. m.a.p., tankcars, New Jersey and New York, gal .30 - —
Houston, Texas gal 30 - —
Partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 —
286°-340°F b.r., 22°C m.a.p., tankcars New Jersey and New York gal .275 - —
319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322° 395°F b.r. 28°C m.a.p., tankcars, New Jersey and New York gal .28 —
Sorbitan monostearate, fib dms., 20,000-lb lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works. lb. .35½- —
fib. dms., smaller lots, works lb. .38½ .40½
Sorbitan tristearate, fib dms. 20,000-lb. lots, works lb .34 —
fib dms. 10,000 to 20,000-lb lots, works lb .36 —
fib. dms., smaller lots, works lb. .39 .41
Sorbitol, NF reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., t.c.l. works lb. .19 —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 —
dms. 1 to 5-ton lots, works lb 25 .26
powd., dms., c.l., works lb. .38½- —
dms. 10,000 to 20,000 lb. lots, works lb. 40½ —
Sorbitol, soln., comi., aqueous, dms., c.l., works lb. .26 - —
dms., t.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 —
bgs. t.c.l., works lb. .23¼ .23½
Chemically isolated new process, bgs., c.l., works lb. .20 - —
bgs., t.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton. 70.00 - —
Soybean oil, crude, tanks, Decatur, lb. .12⅝- —
Foots, soapstock acid 95%, tanks, New York lb. .07⅛ Nom.
Soybean oil, alkali, refd., dms. lb. .1693- .1725
tanks lb. .1493- —
Clarified, dms. lb. .1643- .1675
tanks lb. .1443- —
Salad, refd., dms. lb. .167⅛- .17⅛
tanks lb. .147⅛- —
Soybean oil acids, dbl. dist., dms., lb. .163¾ .19¼
tanks lb. .141¼ —
S. D., dms lb. .15½- .18
tanks lb. .13 - —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom. bls lb. 75 - —
Spearmint oil, NF, dms lb. 5.25 - —
Sperm oil, bleached winter, 45°, dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs. lb. .32 .33
Cakes, cs. lb. .33 .34
Spruce oil, cns., dms. lb 2.10 3.55
Squill, white, bls. lb. .16 .18
Powd., bbls., bxs. lb. .17 .20
St. John's bread, edible, bls. lb. .17 —
Stannic chloride, anhyd., dms., works lb. .877 - .855
Stannic oxide, dms., dlvd lb. 1.205 - 1.195
Stannous chloride, anhyd., dms lb. 1.417 - 1.317
Stannous sulfate, works lb. 1.158 - 1.174
Star root (see Helonias root)
Stargrass root (see Aletris root.)
Stavesacre seed, bgs lb. .60 61
Stearic acid, dbl., pressed, bgs. lb. .18 - .21½
Single-pressed, bgs. lb. .17½- .20
Triple-pressed, bgs. lb. .19¾ .22¼
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs lb. .16½- .18
Streptomycin sulfate, bulk gram. .03 - —
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib dms, dlvd. lb. .48 —
Strontium iodide, jars, 25-lb lots lb 3.57 —
Strontium nitrate, bgs, c.l. works. 100 lbs. 11.00 - —
bgs., t.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb 1.88 —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton. 56.70 -66.15
Strophanthin G (see Quabain, USP)
Strophanthin K bots. oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 2.50 - 3.00
Styrax gum, USP cs lb 4.50 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd lb. .17 - —
dms, t.c.l. same basis lb. .19 —
tanks, frt. equald. lb. .13 - —
Tech., 99.2%, dms., c.l., dlvd. lb. .15 - —
dms., t.c.l., same basis lb. .17 - —
tanks, frt. equald lb. .1099- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.
Styrolyl acetate, bots lb. 1.03 1.10
Succinic acid, purif., cryst., dms., t.l., frt alld lb. .62 —
dms., t.t.l., same basis lb. .63 .75
Succinic anhydride dms. c.l., t.l., dlvd lb. .51 - —
dms., t.c.l., same basis lb. .52 - —
Sucrose, refd. white bgs. refy E. lb. .0940- —
Sucrose acetate, isobutyrate, 90%, dms. t.l., dlvd lb. .33½- —
dms., t.t.l., same basis lb. .35 —
tanks, same basis lb. .31 —
100%, t.l., dms., dlvd. lb. .35½- —
t.t.l. dms., same basis lb. .37 —
Sucrose octa-acetate, denaturing grade 100-200-lb. lots, bgs. t.c.l. works lb. 1.00 —
Sugar (see Sucrose)
Sugar cane wax dom. refd. slabs, 80-lb ctns. works lb. .60 .65
80-lb ctns. spot lb. .65 75
Sulfabenzamide, dms kilo 8.80 9.90
Sulfabenzamide-sodium, dms kilo 9.00 10.10
Sulfacetamide USP fib dms kilo. 6.61 6.83
Sulfacetamide-sodium USP, fib. dms kilo 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo 23.35 24.45
USP, powd. dms kilo 22.60 23.70
Sulfadiazine-sodium, USP dms kilo. 24.80 25.90
Sulfaguanidine, NF X dms kilo 5.50 6.60
Sulfamerazine, USP, microcrystals, dms kilo. 23.50 - —
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 25.90
Sulfamethazine, USP XV microcrystals, dms kilo. 19.65 -20.75
USP XV, powd., dms kilo. 18.75 19.85
Sulfamic acid, cryst. dms, c.l., t.l., works 100 lbs. 16.00 —
dms., t.c.l., t.t.l., works 100 lbs. 17.50 18.50
Gran., dms., c.l., t.l., works 100 lbs. 14.75 —
dms., t.c.l. t.t.l. works 100 lbs 16.25 -17.25
Sulfanilamide NF reg. 1,000 lb., fib. dms., frt. equald lb. 1.75 - —
NF, reg., smaller lots, fib. dms., frt. equald lb. 1.80 - —
Sulfanilamide quinoxaline, veterinary dms kilo. 16.28 - —
Sulfanilic acid, tech. dms. c.l., frt. alld lb. .21 - —
dms., t.c.l., frt. alld lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd. dms. kilo. 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 —
Sulfur, comi., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.25 - —
bbls., mines 100 lbs. 2.80 - —
Sulfur, crude, dom. bright, bulk, f.o.b. cars, mines long-ton. 23.50 - —
export, f.o.b vessels, Gulf ports, long-ton. 25.00 - —
US and Canada, f.o.b vessels Gulf ports long-ton. 25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp. Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton. 24.00 —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines 100 lbs. 6.25 - —
lump, bgs., mines 100 lbs. 4.95 - —
rolls, bgs., mines 100 lbs. 5.50 - —
bbls., mines 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.70 - —
Sulfur, rubbermakers, 98-100%, passing through mesh, bgs., mines. 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —
Refd., bgs., mines. 100 lbs. 4.90 - —
bbls., mines 100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05½- —
ret. dms., t.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq. comi., cyls., works, frt. equald lb. .10 - .13
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 —
refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05½- —
dms., t.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., t.c.l., works 100 lbs. 2.30 - —
tanks, works ton. 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., t.c.l., works 100 lbs. 2.55 3.35
tanks, works ton. 22.35 - —
98%, tanks, works, East ton. 23.50 - —
99% tanks, works, East ton. 23.70 - —
100%, tanks, works, East ton. 23.95 - —
Sulfuric acid, California works, tanks ton. 26.45 - —
CP, NF consumers cbys., c.l., frt. equald lb. .12¾- —
Consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20% tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks works ton. 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 .93
bulk, c.l., Carteret, N. J. unit-ton. .90 .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk f.o.b. vessel at Fla unit-ton. 1.05 - —
Sweet birch oil, USP, northern, cns lb 4.00 9.50
USP, southern, cns lb. 2.00 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., t.c.l., same basis lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., t.c.l., works lb. 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton. 28.00 —
bgs., l.c.l., works ton. 31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton. 31.00 - —
bgs., l.c.l. works ton. 34.00 - —
Talc, dom., fibrous, 99.95%, 409 mesh, micronized bgs., c.l works ton. 38.00 - —
625 mesh, micronized, bgs., c.l., works ton. 80.00 —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton. 34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton. 19.40 —
bgs, l.c.l. works ton. 37.00 —
Imp., Canadian, grd., bgs., c.l., sodium mines ton. 20.00 -35.00
tanks works lb. .027⅛- .031⅛
Tall oil, crude, tanks, works lb. .031¼- —
Acid, refined dms., c.l., works lb. .083¼- .10
tanks, works lb. .071½- .083¾
Dist., depending on grade, dms., c.l., works lb. .061½- .091¼
tanks, works lb. .051¼- .08
Tall oil fatty acids, less 2% rosin acid, dms., c.l., works lb. .08 - .11¼
tanks, works lb. .06 - .09¼
2-6% rosin acid, dms., c.l., works, lb. .07 - .08
tanks lb. .05 - .06
Tallow, edible, tanks, dlvd lb. .10 Nom.
Inedible, fancy, bleachable, tanks, lb. .08 - .08⅛
fancy, guaranteed, bulk, f.o.b. steamer lb. .08½ Nom.
dms., f.a.s. lb. .09½ Nom.
tanks, dlvd. lb. .08¼- .08⅜
No. 1, dlvd lb. .07½- .07⅝
Prime, tanks, dlvd lb. .07⅜- .07⅞
Special tanks, dlvd. lb. .07⅝- .07¾
Sulfonated, 25% bbls., l.c.l. lb. .08½- .08¾
50% bbls., l.c.l lb. .10½- .11
Tallow acids, dist., dms lb. .14½- .17
tanks lb. .12 - —
Hydrogenated, dms lb. .16¾- .19¼
Tallow oil, acidless, dms., c.l. lb. .14 - —
dms., t.c.l. lb. .16 - —
tanks lb. .12½- —
Tangerine oil, Florida, dms lb 4.75 —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.75 5.00
Tannic acid, NF fluffy, bbls., 1,000-lb lots lb 2.05 —
bbls., smaller lots lb 2.06 2.07
powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech., dms lb 1.05 —
Tansy oil, dms lb. 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., dms., t.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., frt. equald gal. .53½- —
basis gal. .60 —
dms., t.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms, c.l., same basis gal. .75 - —
dms., t.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF 100-lb bgs., c.l., frt. equald lb. .41 - —
bgs. 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib. dms lb. 70 —
Terpineol, extra, dms lb. .50 .60
Prime, dms. lb. 40 .50
Terpinyl acetate, extra, cns., dms. lb. .64 75
Prime, dms lb 53 56
Terpinyl propionate, dms lb. 1.65 1.70
Testosterone, USP bots gram No prices.
Testosterone propionate, USP bots. gram. No prices.
Tetrachloroethane, dms., works lb. 14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., t.c.l., works lb. .22 .23½
Tetraethyl orthosilicate, dms., c.l., divd E lb. .60 —
dms, t.c.l. divd. E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 —
Tetraethylenepentamine, dms., c.l., divd. E lb. .53½- —
dms., t.c.l., divd. E lb. .55 - —
tanks, divd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., t.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., t.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —
Tetrahydrofurfuryl alcohol, dms., t.c.l., Newark, N. J. lb. .28½- —
tanks, dlvd. E. of Denver lb. .25 - —
tanks, dlvd. W. of Denver lb. .26 - —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt alld E lb. .39 - —
t.c.l., t.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal, dlvd lb. 7.50 -10.00
Thallium sulfate, 99%, bots., dlvd. lb 5.00 -10.00
Theobromine, NF, fib dms. 100-lbs., f.o.b., works lb. 4.10 4.15
Theobromine and sodium acetate, USP, fib dms. 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb 3.80 - —
Theophyline, USP, anhyd. 100-lb. dms., frt alld lb 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt alld kilo. 36.00 - —
USP, ampule grade, fib., dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib dms., frt alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thiodiphenylamine (see Phenothiazine)
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs, works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 86% dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech, bgs, t.l. frt alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
dl-Threonine, dms., 25 kilos, works, kilo. 115.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs lb. .12 - —
triple sifted, bgs lb. .25 - —
Spanish, bgs lb. .09 - —
Thyme oil, NF, red, cns., dms lb. 3.35 - 3.60
NF, white, cns lb. 3.60 - 3.95
Tech., white, cns lb. .80 - 1.10
Thymol, fib dms., 25-lbs., f.o.b. works lb. 2.45 —
Thymol iodide, NF, dms, 100-lbs. f.o.b. works lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.10 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd. (see Stannic chloride anhyd.)
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., t.c.l., dlvd. lb. .26½- —
reg., bgs., c.l., dlvd. lb. .25½- —
bgs., l.c.l. dlvd. lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla ton. 180.00 - —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y ton. 205.00 - —
bgs. ton lots same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E lb. .27½- —
bgs. c.l. dlvd E lb. .28½- —
Titanium dioxide-calcium pigment, 30% $Ti O_2$, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs., t.c.l. works lb. .09⅞- —
50% $Ti O_2$, high-tinting, dms. c.l., lb. .14⅜- —
dms. t.c.l lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 —
dms., t.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld. E lb. .81 - —
dms., l.c.l., l.t.l., 5,000 lbs- 19,999 lbs., same basis lb. .81½- —
dms., l.c.l., .l.t.l., less than 5,000 lbs., same basis lb. .84 - —
For west coast delivery add 2c. per lb.
d-a-Tocopherols, NF mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 —
dl-a-Tocopherol, bots. kilo. 99.00 —
dl-a-Tocopheryl acetate, bots kilo. 90.00 —
25% dry. powd., bots kilo. 22.50 -24.00
33% dry. powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb. 1.55 —
Paste, kgs., 100% basis lb. 1.50 —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns lb. 4.00 - —
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Toluene, petroleum, indust., tanks, f.o.b., frt. equald gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms. t.t.l. same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c per lb more.
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l lb. .90 - —
dms. 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms. c.l., works, frt. alld lb. .83 - —
dms., t.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms. c.l. works, frt. alld lb 30 - —
dms., t.c.l. same basis lb .31 - —
tanks, same basis lb. .28 - —

p-Toluidine, tech., flake, dms., frt. alld. lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.06
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs. works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms., l.c.l., t.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs. lb. 3.75 3.80
No. 3, cs. lb. 3.40 3.65
USP. powd., bbls. lb 1.05 1.15
Triacetin, dms. c.l., divd. E. of Rockies lb. .38 - —
dms., l.c.l., same basis lb. .39½- —
tanks, same basis lb. .35½- —
Triallylamine, dms., c.l., divd lb. .985 - —
dms., l.c.l., divd. lb. .995 - —
tanks, divd lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver. lb. .42½- —
non-ret dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld E. of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms. l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin dms. l.c.l. divd lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works lb. .52 - —
USP, 100-lb dms., frt. equald lb. 1.25 - —
Trichlorobenzene dms. c.l., frt. alld. E lb. .15 - —
dms., l.c.l. frt alld. E. lb. .16 - —
tanks, frt. alld E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher
1,1,1 Trichloroethane, dms., c.l., divd. lb. .13¼- —
dms., l.c.l., divd lb. .16 - —
tanks, divd lb. .12¼- —
1,1,2 Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms., c.l., or t.l., divd lb. .12½- —
dms., l.c.l., divd. lb. .14 - .14½
tanks, divd. lb. .11¼- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms. l.c.l. same basis lb. .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys. works, frt adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., divd lb. .35 - —
dms., l.c.l., divd. lb. .36 - —
tanks divd lb. .32½- —
Petroleum, dms., c.l., divd lb. .35 - —
dms., l.c.l. divd. lb. .36 - —
tanks divd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., divd. E lb. .22½- —
dms., l.c.l., divd. E lb. .24 - —
tanks, divd. E lb. .20 - —
Triethanolamine, dms. c.l., divd E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l. frt alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine dms. c.l., divd E. lb. .50 — —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks, frt alld E. of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., divd. lb. .40½- —
dms., l.c.l., divd. lb. .42 - —
tanks, divd lb. .38 - —
Triethylene glycol, dms., c.l., divd. E lb. .21 - —
dms., l.c.l., divd. E lb. .22½- —
tanks, divd. E lb. .18½- —
Triethylenetetramine, dms., c.l., divd. E lb. .51½- —
dms., l.c.l., divd. E lb. .53 - —
tanks, divd E lb. .49 - —
Triisobutylene, tanks, divd. lb. .08 - —
Triisopropanolamine, dms., c.l., divd. E lb. .23¼- —
dms., l.c.l., divd E lb. .24¾- —
tanks, divd E lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks frt equald 100% basis. lb. .26 - —
25-40% soln. dms. c.l., frt. equald, 100% basis lb. .35 - —
dms. l.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis frt equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., divd. E lb. .30½- —
dms., l.c.l., t.t.l., same basis lb. .31½- —
Trioxanes, pure, dms. c.l., t.l., works lb. .50 - —
dms. l.c.l. works lb. .51½- —
Tripentaerythritol bgs., c.l., t.l., divd. E lb. .34 - —
bgs., l.c.l., t.t.l., divd E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls. l.c.l. frt equald lb. .43½- —
Triphenylguanidine, bbls. works lb. .90 — —
Tripropylene dms. c.l., divd. E gal. .44 - —
dms., l.c.l. same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt alld E lb. .20½- —
dms. l.c.l. t.t.l. frt alld E lb. .22 - —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Trypophane, dms., 1 kilo, works. kilo. 154.00 — —
Tung oil, dms., New York lb. .27 - .27½
tanks, imported lb. .25½- .25¾
tanks, domestic, mills lb. .25½ Nom.
Tungsten metal powd. 2.0-2.5 microns, dms works lb 4.25 — —
Tungstic acid, tech., dms., 1,000-lb lots, works lb 2.25 — —
dms. smaller lots, works lb 2.45 — —
Turkey red, bbls works lb 62 — —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .33 - .35
Tuscan red, bbls., frt. equald lb. .28 - .30
Tyrothricin, USP, 1 to 5 kilos gram. .90 - —

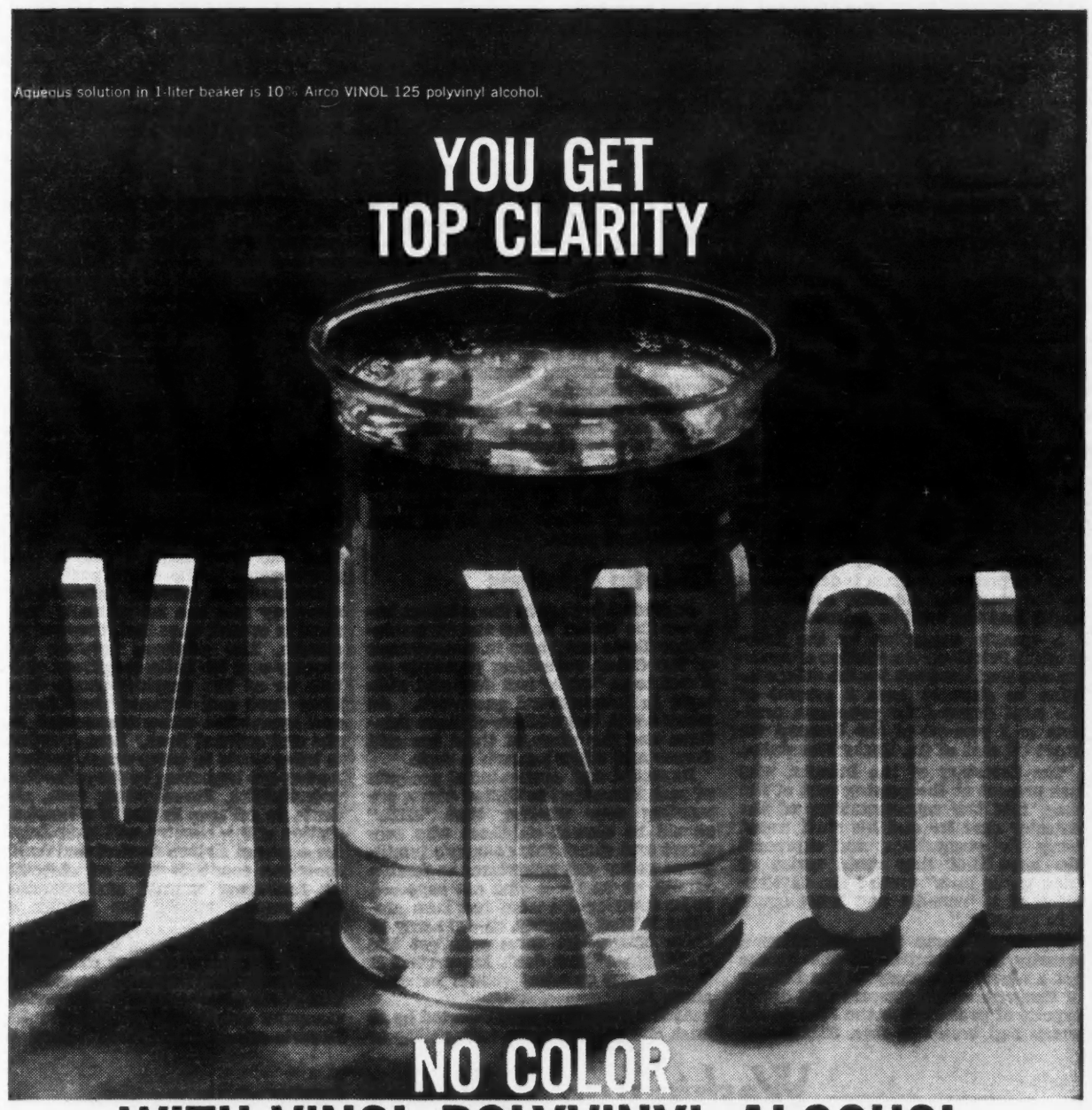
U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., divd. E. of Rockies lb. .30½- .35
Ultramarine blue, jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c. higher W. of Rockies.
Umber, pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l. works lb. .07¾- .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 45% N, indust., bgs., c.l., t.l., f.o.b. plant ton. 100.00 - —
Feed grade, c.l., t.l., f.o.b. plant. ton. 95.00 - —
45% N, agricultural, bgs., c.l. f.o.b. plant ton. 92.50 - —
Bulk, c.l., t.l., same basis ton. 86.50 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs. lb. .25 - —
dl-Valine, dms., 1 kilo, works kilo. 37.00 - —
Vanadium pentoxide, tech., dms., works lb. 1.38 - —
Vandyke brown, bbls., works lb. 09½ .12
Vanilla beans, Bourbon, tins lb. 6.95 - 7.10
Mexican cuts, tins lb. 7.10 - 7.40
whole, tins lb. 7.50 - 8.50
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 —
less than 2,000 lbs lb. 3.20 3.30
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb .0525- —
25%, bgs., works lb .0575- —
30%, bgs., works lb .06 —
35%, bgs., works lb .0625- —
40%, bgs., works lb .0675 —
Vetiver oil, Bourbon, cns lb. 17.00 -17.25
Haitian, cns. lb. 12.00 -14.00
Victoria blue toner, molyhdated, PMA 250-lb. bbls., divd. E. of Rockies lb 4.50 4.95
Tungstated, PTMA, 250-lb. bbls., divd. E. of Rockies lb 5.55 —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.

—Continued on page 61



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Problems in Petroleum

The oil-import program of the Department of the Interior has been a bone of contention ever since its introduction. It is still progressively getting more and more critical attention. It got a big dose of that about two weeks ago in a two-day hearing by the department, covering the alleged shortcomings of its operation as viewed by the domestic industry from the angle of how it should be revised.

Representatives of the major oil companies differed widely with those of independent producers with respect to what should be done to it. The former group was largely in favor of continuation of the present method of determining total imports and allocating the total quota among importers. The independents, who were of the opinion that the present program is detrimental to the domestic industry, asked and urged that the total be reduced.

A specific suggestion by the Independent Petroleum Association of America was that the basis for the determination be changed from 9 percent of the total demand for petroleum products to 1 percent of the demand for crude oil east of the Rocky Mountains.

The Secretary of the Interior, who was present at the hearing part of the time, told the representatives of the industry that he and his staff would study the suggestions, and expressed the hope that they could arrive at "new guide lines" toward the development of a "sounder and more equitable program."

About the same time, the internal security subcommittee of the Senate got a report of a study by the Library of Congress which forecast that Soviet exports of petroleum to the Free World, which had been less than 300,000 barrels daily in 1959, would reach 900,000 barrels by 1970.

The report said that, while European industrial nations and Japan probably would be the major markets for Soviet oil, the program called for penetration of underdeveloped countries in Asia and Africa, where "possible losses in the oil business are tied more closely with US foreign policy, and the US government will have to play a major role in combatting Russia's economic-political offensive."

Soviet exported oil is priced low, the report said, citing an agreement made with Italy in November, 1960, under which crude oil is supplied at Black Sea ports for $1 a barrel, making the delivered price to Italian refineries 37.5 percent below that of oil from Persian gulf ports.

US-Latin Relations

Just what is what in the relations between the United States and its hemispheric Latin neighbors in consequence of the Cuban something popularly referred to as "crisis" is a deep and wide topic in international guesswork. As many see it, the whither of those relations and the when of them are still deeper and wider as such a topic.

Impartial and open-minded analysts of such things in the United States are puzzling over whether that "crisis" should be blamed on those who construct and direct this country's intelligence policy and procedures in foreign affairs, or on those who are supposed to be carrying out what has been provided in that category, or—as many of them believe—on those who get the "intelligence" and don't know what it is all about or what should be done about it.

At the same time, it is reported by at least one public person with ability to get and to analyze such things that business and political leaders in Latin America have a strong conviction that the United States has not taken direct action in the Cuban "crisis" because of fear of what the Soviet Union might do.

In view of that attitude, it is very strange that the endeavors of the United States to get the Organization of American States to do what it has a clear obligation to do with respect to the anti-American—not merely anti-US—conditions in Cuba get nowhere because the Latin OAS members (according to quite reliable information) are fearful of what might be the retaliatory reaction of the in some instances rather substantial number of communistically inclined individuals and groups among their peoples.

Nothing better than guessing can be presented in the setting forth of expectations on what will be the effects on US-Latin relations of this country's legislative approval of a $600,000,000 long-range commercial and social economic budget for the Latins in promotion of President Kennedy's alliance-for-progress idea. Bolivia has "accepted" more than thirteen million in new US aid. Chile has launched a ten-billion-dollar progress plan, with some support via domestic financing. Honduras has been granted a loan of $9,000,000 with fifty-year credit and no interest by the International Development Association and another $2,500,000 from the Inter-American Development Bank. The money is to be used to build roads. Argentina has governmental hopes that it will soon get a loan of $90,000,000 from the World Bank to help finance a giant electric plant.

It is seriously to be urged that the United States as a lender and as the promoter of the creation of the two development agencies, will by means of some real intelligence and advisory—and administrative—service, at least try to have the moneys loaned to the Latins put to better use for the peoples as a whole than they have got out of what has been handed out to their governments in the recent past.

International political relations are necessary and can be mutually beneficial in several ways. But, they are not enough. The relations between this country and its Latin neighbors could best be of the people-to-people type. They need and demand development and application along commercial, social and cultural lines. Some progress is being made in those areas. Business leaders are beginning to recognize their potentialities. Seven young men, students in colleges in the Northeastern section of this country, will leave July 1 for a tour of sixteen Central and South American countries with an objective of furthering mutual understanding and respect among the peoples of America.

It is most encouraging for those who know the value of cultural relations to learn that Helen Hayes and some members of the present American Repertory Company now touring Europe for the Department of State have agreed to play an extra three months and tour Latin America. It will be very good mutually for Inter-American cultural relations for the Latins to be given such excellent evidence that this country has some culture above the jazz level.

Much more will be contributed along that line if President Kennedy, disregarding political pressures, selects from those he is considering for the post of Assistant Secretary of State for Inter-American Affairs the president of the University of California.

Meetings

ACHEMA 1961, German chemical engineering exposition and congress, Frankfurt am Main, Germany, June 9-17.

Air Pollution Control Association, annual meeting, Commodore hotel, New York, June 11-15.

American Chemical Society, national meeting, Chicago, September 3-8.

American Petroleum Institute, annual meeting, Palmer House and Conrad Hilton and Congress hotels, Chicago, November 13-15.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 25-30.

American Soybean Association, annual convention, Claypool hotel, Indianapolis, Ind., August 28-29.

American Tung Oil Association, annual meeting, Edgewater Gulf hotel, Edgewater Park, Miss., September 26-28.

Armed Forces Chemical Association, annual meeting, Statler-Hilton hotel, Washington, D. C., September 13-15.

Association of Food & Drug Officials of the United States, annual conference, Mayflower hotel, Washington, D. C., June 18-23.

Canadian Agricultural Chemicals Association, annual meeting and conference, Mont Tremblant Lodge, Mont Tremblant, Quebec, September 18-20.

Chemical Buyers Group of National Association of Purchasing Agents, annual meeting, Conrad Hilton hotel, Chicago, June 6.

Chemical Industries Exposition, Coliseum, New York, November 27-December 1.

Chemical Market Research Association, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 11-12; Mark Hopkins hotel, San Francisco, November 28-December 1.

Commercial Chemical Development Association, annual outing, Bedford Springs hotel, Bedford Springs, Pa., May 24-25.

Drug,Chemical & Allied Trades Association, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, D. C., November 2-4.

Gordon Research Conferences, petroleum, Colby Junior College, New London, N. H.; chemistry of coal, New Hampton School, New Hampton, N. H., lipide metabolism, Kimball Union Academy, Meriden, N. H., June 12-16.

International Congress on Pure & Applied Chemistry, Montreal, Canada, August 6-12.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 8-10.

National Agricultural Chemicals Association, annual meeting, Homestead, Hot Springs, Va., October 29-November 1.

National Association of Retail Druggists, annual meeting, Fontainebleau hotel, Miami Beach, Fla., October 1-5.

National Chemical Exposition, sponsored by the Chicago section of the American Chemical Society, International Amphitheater, Chicago, September 5-8.

National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-14.

National Wholesale Druggists' Association, annual meeting, Americana hotel, Bal Harbour, Fla., October 14-19.

Packaging Institute, national packaging forum, Biltmore hotel, New York, October 18-20.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Society of Chemical Industry, annual general meeting, Oxford, England, July 10-14.

Society of the Plastics Industry, national conference, Commodore hotel, New York, June 5-9.

Synthetic Organic Chemical Manufacturers Association, spring outing, Skytop Lodge, Skytop, Pa., May 22-24.

Washington Talks It Over

Chemical Industry Finds the Field of Government Contracts Is a Difficult One to Walk Through For It Is Becoming Cluttered With the Administration's Restrictions and Ideologies.

By Ralph L. Cherry
Washington Editor

Working for the government is not all beer and skittles, as the chemical industry well knows from long experience with the endless red tape involved. And the feeling is growing that dealings in Washington are being made progressively more difficult now by the reform element that is rapidly becoming a dominant group in the Kennedy administration.

This group is beginning to make its influence felt in many areas. And one that concerns the chemical industry directly is the area of government contracts.

The group is succeeding in getting new restrictions written into the contracts, embracing the ideologies that are compelling chemical companies and others to take a second look before bidding for this work.

First is the matter of the non-discrimination clause. While this is not new to the industry, the President's executive order of last March setting up the Committee on Equal Employment Opportunity, has injected new life into the clause, which the committee promises to enforce with vigor.

Also, there is the matter of federal standards for health environment, now being drawn up by the Department of Labor. Contractors, thoungh they don't have to agree formally in the contract to abide by these standards, nevertheless can expect to be kept on their toes by the labor unions and departmental agents to see that they do comply.

Now there is a move afoot to insert a clause in the contracts dealing with identical bidding. General Services Administration is drafting language for future contracts requiring each bidder to certify that the bid he submits was arrived at independently without collusion.

A slowdown in bidding for government contracts has already shown up in some quarters. The Defense department has been running into trouble getting the usual response to its invitation for bids to meet its textile needs. The bidders have been worried about the non-discrimination clause, particularly those companies located in the south.

The new clause on non-collusive bidding may be expected to cause some misgivings in other industries about submission of bids. It will if it means that every time two or more companies submit identical bids they can expect a government agent to come around asking how come.

Hydrogen Peroxide Has a Hope: Sales of 60.5 Million Lbs. This Year

Market for hydrogen peroxide has been growing at a cozy rate of 14 percent yearly, but several months of recession weather, though now clearing, should cut that to about 10 percent in 1960. This is the estimate of a source very close to the market, who figures the year's sales at 60.5 million pounds as against a still top-heavy US capacity of 88.5 million pounds. He expects the breach to be closed by mid-decade—provided that the attractive growth rate, sparked by organics, doesn't lure in too much new capacity.

Of three major outlets—textile bleaching, organic chemicals and paper—the first, though now largest, is rated the least dynamic.

Accounting for about 40 percent of hydrogen peroxide sales, textile bleaching is expected to grow in volume with the population increase. But as a percentage of peroxide sales it will decline, giving ground to chemicals, which now comprise a booming 20 percent of the market.

Rendering textiles relatively-static is the lack of any new worlds to conquer. Over 85 percent of all cotton is already bleached by peroxide, it is pointed out, and only modest gains are sighted in other fabrics.

Chief among chemical outlets are epoxy plasticizers. From a current volume of 35 million pounds a year, sales of these materials should double by 1965 to 70 million pounds, according to the same source.

Paper Production Lower

The American Paper & Pulp Association reported paper production for the week ended May 13 at 90.6 percent of theoretical capacity, as compared with the revised figure of 91.7 percent for the previous week and 98.5 percent for the corresponding week of last year.

Pulp bleaching, however, with a lesser growth rate, figures to continue to taking about 10 percent of total peroxide tonnage. Still, this means it must expand by 14 percent a year.

Where will the expansion take place? The spokesman cited above sees high-density bleaching of ground wood as one of the most promising areas of the market.

Cutting past the technical complexities, this is basically a low-cost method of upgrading a cheap paper industry raw material. Several drawbacks in ground wood are reportedly solved by the new process: Brightness is achieved, printability is improved and bleaching costs are reduced.

By increasing the amount of fiber treated by a given quantity of liquor, the process improves chemical efficiency, reducing the amount of peroxide required. At first hearing, this sounds like a sad note, but not so.

In the not so long run hydrogen peroxide would gain by cutting into areas now governed by other bleaching materials. More than this, the paper industry would be encouraged to turn out higher quality, brighter stocks using a greater overall tonnage of peroxide, since it could be done cheaply. This, at least, is the way one peroxide producer sees it.

As evidence, he reports that two high-density "crumb" installations have been started up within a year, and that the process seems to be catching on.

In the current peroxide market, business recession has been felt in all three major areas—in chemicals as well as in the more obviously lagging textiles and paper.

But since mid-March the trend has been steadily upward, giving producers at least an outside chance of advancing 10 percent deeper into the golden (bleached) sixties.

Acids

Hydrochloric—The industry's statistical position improved significantly in March, heralding, trade sources trust, the beginning of a business recovery. Production was up sharply, hitting 74,895 tons, as against 67,088 in February; while stocks rose only slighly to 15,828 tons from 14,569.

Hydrofluoric—Government demand and chemical industry call for fluorinated solvents are hitting a good seasonal stride, trade sources report. Prices are unchanged, supplies adequate.

Phosphoric — Ouput and sales are reportedly ahead of last year's totals, a situation prevailing for no other major acid. Census Bureau reports March production at 205,591 tons, up from 179,939 in February. Stocks closed virtually unchanged at 31,309 tons.

Price Trends

Advanced

Copper metal, 1c per lb.
Copper carbonate, 55c. per 100 lbs.
Copper chloride, cupric, ½c. per lb.
Cuprous, 70c. per 100 lbs.
Copper sulfate, cryst., 25c. per 100 lbs.
Monohydrated, 35c. per 100 lbs.
Tribasic, 50c. per 100 lbs.
Tin metal (straits), 1c. per lb.
Salts, ¼c. to ⅜c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 20, 1960
106.85	106.84	106.81	106.88

For Current Prices See Page 9

Sulfuric—Steel output continues to gain. Production in the week ended May 13 totaled 1,988,000 tons, up from the previous week's 1,943,000 tons, American Iron & Steel reports. Production for the year to date stands at 30,975,000 tons, as against 47,979,000 tons last year.

Bases and Salts

Caustic Soda—Inorganic chemical producers are showing renewed activity, but the paper industry continues to lag behind last year's pace. Textile outlets are rated fair, rayon just about holding its own though its spokesmen are waxing more optimistic.

Chlorine — Continuing as the favored electrolytic product, chlorine has found fair consuming demand in most outlets. Most notable exception is paper, which has fallen about 8 percent behind 1960 volume.

Nonferrous Metals

Copper—Stocks dropped sharply in the US in April, causing a significant decline in world stocks and helping to trigger last week's one-cent price advance. Primary producers' metal is now quoted at 31c. a pound.

Copper Institute reports US primary crude production at 95,239 tons in April, down 97,457 in March; refined output at 128,440 tons, down from 152,145 tons, and deliveries at 125,905 tons, up from 112,448 tons.

World primary crude output outside the US was 200,233 tons, down from 215,507 tons; refined was 164,886 tons, down from 187,220; and deliveries, 198,835 tons, down from 207,882 tons.

Copper Chemicals—With higher copper metal, the chloride has been advanced ¼c. a pound for cupric and 70 cents a hundredweight for cuprous. Carbonate is up 55 cents a hundredweight across the board, and sulfate has been lifted 25 cents for crystalline, 35 cents for monohydrated and 50 cents for tribasic. New listings appear in today's price pages.

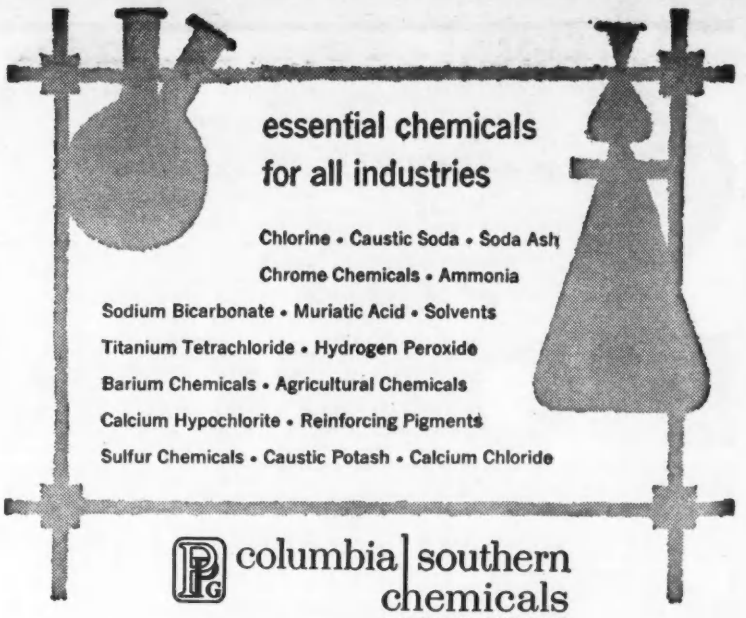
Tin—Prices hit a record high, closing on Friday at $1.11 a pound, spot.

Zinc—A leading smelter has reduced the premium charge for special high grade zinc by one-half cent a pound, tabbing it at 12½ cents a pound, E. St. Louis basis. This compares with an unchanged price of 11½ cents for prime western. In line with the move, zinc alloys for die castings were reduced one-half cent by major producers.

Heavy Chemical Briefs

AEC CONTRACT LET: Atomic Energy Commission has signed a new contract with Union Carbide Nuclear Company for purchase of uranium concentrates from mills at Rifle and Uravan, Colo. The agreement replaces two separate contracts which would have expired March 31, 1962.

NUCLEAR CONTRACT LET: Michigan Chemical Corporation has signed a pact with North American Aviation's atomics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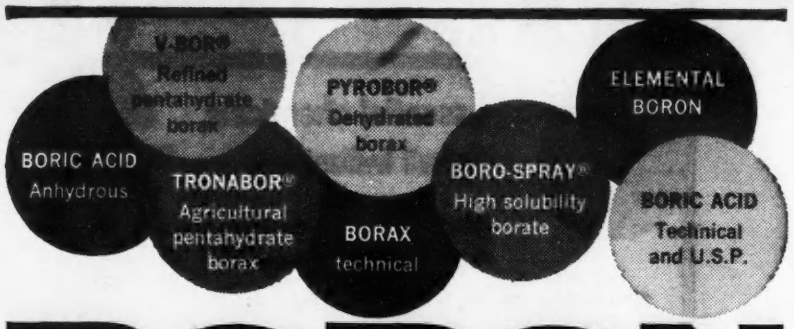

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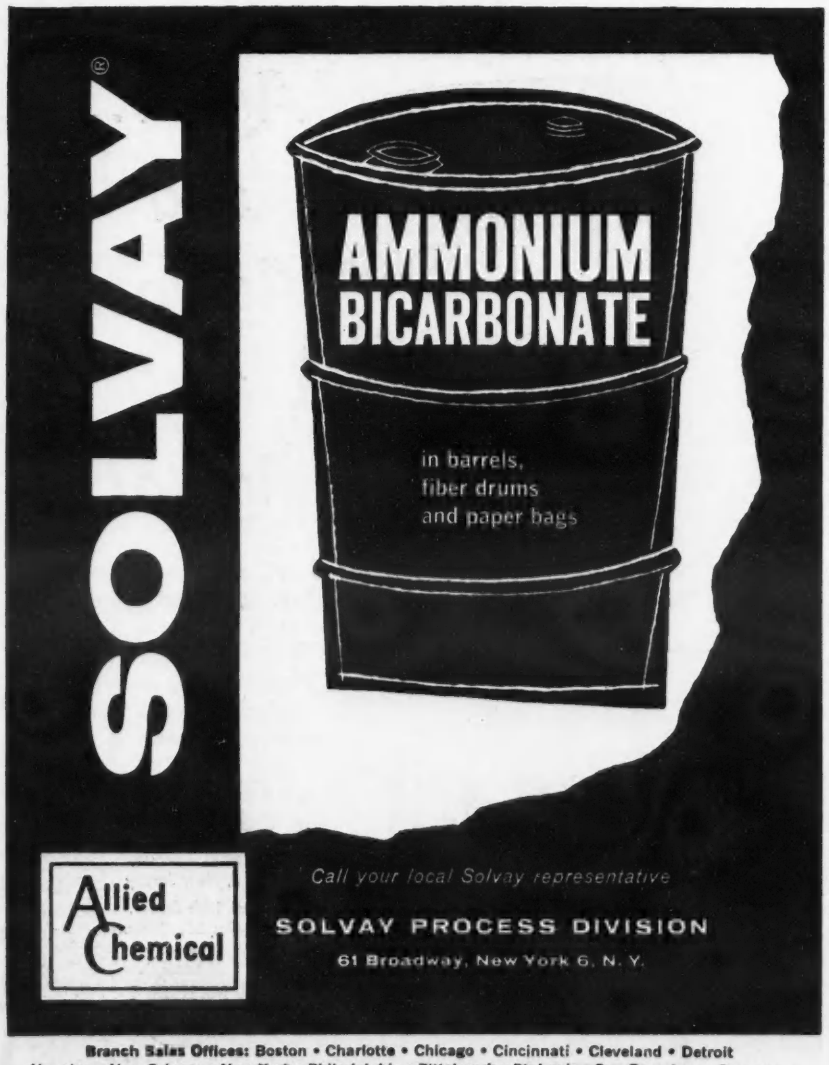

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Heavy Chemicals

international division calling for supply of a high-density gadolinium-samarium oxide blend to be used in the control rods of the Hallam nuclear power facility at Hallam, Neb.

STEEL GALVANIZING—An improved process for hot-dip galvanizing of steel has been developed by Dow Chemical Company. Key to the Dow process: A slight amount of magnesium is added to the galvanizing batch. This reportedly improves corrosion protection by 20 to 90 percent in industrial-marine atmospheres.

SULFUR OUTLOOK—In a report to Pan American Sulphur Company shareholders, president Harry C. Webb says that the effect of the recent sulfur price advance will be felt in the second half of 1961 and in 1962. He notes that the new mining law recently enacted by the Mexican congress has had no "material adverse effect on the company's current operations."

Fisons, of Britain, Develops New Amine Pesticide Base

Fisons, Ltd., British fertilizer company, claims its pest control division scientists have developed a new pesticide base to carry such killing chemicals as Union Carbide Corporation's "Sevin." The new base will keep the pesticide sticking even to waxy leaves after heavy rains, Fisons says.

Stearic acid is combined with an amine base and the pesticide in water. When this is sprayed droplets fall without evaporating because of the coating of fatty acids. The base evaporates leaving the stearic acid sticking to the plant with particles of the pesticide.

Construction has started on another Fisons fertilizer venture in the Midlands of England. Nitrogen Fertilizers, Ltd., owned jointly by Fisons and West Norfolk Fertilizers, Ltd., will produce nitrogen compounds basing production on raw materials from the steel industry at Scunthorpe. Completion is expected in 1962 and the product will be sold by the two parent companies.

Maleic From Heyden

—Continued from page 5

dustry's capacity will rise to 259 million pounds in 1961. But demand is expected to require about five more years before it hits the 120-million-pound mark.

Who, the trade observers are asking, is going to take all the maleic off Heyden's hands?

Apparently, Heyden is going to take some itself—for captive use. Then, the company has some old friends, such as the makers of alkyd and polyester resins, who will probably want some, too.

But, R. M. Aude, president of the New York corporation's Heyden Chemical Division, look at it this way:

"We are coinfident that we will be able to sell a very substantial volume of the chemical, new to us, from this plant. We are well known in marketing pentaerythritols to manufacturers of alkyd resins and polyester resins, two large volume consumers of maleic anhydride. In addition, we will have a widening line of materials for a manufacturer of polyester resins, including benzoic acid and fumaric acid, for which new plants are also being brought on stream."

Then, Mr. Aude adds that early in the year (OPD, 2/13/61) the division announced its entry "into the specialty chemical field, for which we are supplying a number of materials designed as curing agents and modifiers for epoxy resins."

"Certain of these products," he said, "as well as products of Heyden Newport's Newport Industries Division, which manufactures a line of paper sizes, will utilize maleic anhydride."

But, in case the maleic begins to back up, the plant can be turned to the production of related chemical intermediates. Scientific Design Company, the constructor, has seen to that, being fully aware that Heyden has an expanding line of products for the plastics, synthetic resins and other associated industries.

Pfizer Men Synthesize

—Continued from page 5

methyl-6-methylene-5-oxytetracycline, the new drug is a derivative of tetracycline.

The new antibiotic differs from Pfizer's "Terramycin" in possessing a 6-methylene substituent, an entirely new structural departure in tetracycline chemistry. Its more complex molecule is created synthetically, a departure from the conventional fermentation, process by which "Terramycin" and many other antibiotics are produced, Pfizer points out.

"While 'Terramycin' continues to be widely prescribed by physicians, and has proven itself effective in controlling more than 100 different types of infection, the new antibiotic holds promise of even higher efficiency," the company adds.

Turpentine Poison

—Continued from page 4

labels for turpentine to show it as a "poison."

This also carries with it the requirement that a skull and crossbones be shown prominently on the label.

Some of the protestants question the FDA's reasoning for such a label in the light of the history of the use of turpentine, but mostly they protest against having to have new labels prepared after having new ones printed earlier this year in terms that they thought would be in compliance with the law.

Thousands of dollars of inventory in labels and lithographed containers are involved in the matter and in at least one case it said that a company would have to go out of business if it is not allowed to use up its supply.

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Zinc Oxide
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Manganese Sulfate
Manganous Oxide
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Sodium Silicofluoride

Obituaries

Dr. Ivor Griffith

Dr. Ivor Griffith, president of the Philadelphia College of Pharmacy and former president of the American Pharmaceutical Association, died May 16 in Philadelphia. He was seventy years old.

Dr. Griffith was an editor, chemist and lecturer as well as an educator. He edited the *American Journal of Pharmacy* from 1921 to 1941 and *Science Talk* from 1924 to 1941.

James F. Drew, executive in the flavoring extract business for forty years, died May 18 in Neptune, N.J. He was seventy-four years old.

James P. Moran, chemical engineer for McGraw-Hydrocarbon Company of New York, died May 15 in Seoul, Korea. He was thirty-seven years old.

Carter Poland, sr., former director of the American Association of Soap & Glycerine Producers, died May 13 in Anniston, Ala. He was seventy-two years old. Mr. Poland was owner and president of Poland Soap Works, at Anniston.

Horace S. Ritter, retired manager of the tanners' division of Socony-Vacuum Oil Company, died May 18 in Suffern, N.Y. He was seventy-one years old. Mr. Ritter, a leather chemist, served with Socony-Vacuum for forty-two years.

Barrett Beard Russell, jr., who retired in 1959 as a consulting engineer for McKesson & Robbins, Inc., New York, died May 17 in Montclair, N. J. His age was seventy-four.

BTX and Naphthalene

—*Continued from page 7*

metallic sodium (which USI makes) for removal of thiophene.

Sodium reacts with thiophene and other sulfur bodies to form sodium sulfide and results in a benzene fraction, a benzene-toluene cut or BTX with thiophene content of less than one ppm.

USI has developed two methods for use of sodium to desulfurize light oils. One system which calls for mechanical agitation costs 1.55 cents a gallon for acid-washed light oil.

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For desulfurization of naphthalene, USI has come up with a process in which sodium is metered directly to the reaction kettle. Operating cost for 10 million pounds of naphthalene per year: 0.57 cents a pound; investment cost: $50,000.

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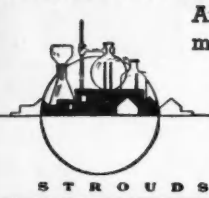

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Chlor-Alkali Growth Rate Seen 4.5 Percent

—*Continued from page 5*

growth contributions of ethylene oxide and glycerine are declining.

Increasing importance of titanium dioxide and various specialty metals will provide the majority of growth in the inorganic area.

Principal growth areas are in pulp and paper (consumption growing 2 percent a year faster than total chlorine); ethylene dichloride (largest outlet is vinyl chloride, per- and trichloroethylene (good growth still evident), and phosgene (tremendous potential).

Principal mature areas are oxides (direct oxidation routes are replacing chlorine); glycerine (through non-chlorine-consuming routes), and hydrochloric acid (greater use of byproduct HCl).

Although the forecast for future chlorine consumption might be on the conservative side, it is pointed out that the number of rapid-growth chlorine consumption items is declining. (In 1951, 17 percent of total consumption products grew at the rate of more than 7 percent a year; in 1959, only 10 percent).

Hydrochloric Merchant Uses*

	1965	1959
Chemical	54.5	53.0
Metals & Ores	14.3	12.9
Oil Well	9.1	7.6
Food	6.6	7.4
Other	15.5	19.1
Total	100.0	100.0
Merchant tonnage	525,000	418,000

* Percent.

Of merchant markets for chlorine, it's predicted that in the late sixties, paper might replace chemical consumption as the leader. Water treatment and miscellaneous uses are expected to decline.

Caustic Soda—Historical growth, 7.5 percent a year; in the last decade, 7 percent a year; in the next few years, 4.5 percent a year. Output in 1965: 6 million tons, up 23 percent over 1960.

In 1951, 20 percent of caustic came from soda ash. In 1959, only 7 percent was made via lime-soda. In 1965, 98 percent will come from electrolysis.

Chemicals have increased their share of caustic consumption from 35 percent in 1951 to 43 percent in 1959, and should reach 43.8 percent in 1965.

Paper has grown steadily in importance. Increased use of caustic by the aluminum industry has nearly offset the maturity of the rayon industry.

Chlor-Alkali Output*

	1965	1959
Chlorine	5.7	4.3
Caustic Soda	6.0	4.7
Soda Ash	6.1	5.6
Hydrochloric Acid	1.3	1.0

* Millions of tons.

Major growth uses of caustic in the next decade: aluminum, paper, petroleum. Mature uses: change in processes for ethylene oxide manufacture; detergent manufacture (replacing soaps), and the static position of rayon.

Merchant markets are expected to decline slightly. Most remarkable aspect: rise of the paper industry as a consumer offsetting declines in rayon. Aluminum purchases are also expected to grow significantly.

Soda Ash—Historical growth, 3.6 percent a year; recent years, 1.4 percent a year; forecast, 1.5 percent a year for the next few years. Production in 1965: 6,120,000 tons.

Natural soda ash has grown steadily as a source of material, and should reach 18 percent of total volume by 1965. Decline in chemical use for ash is held due to shift in output of caustic soda from lime-soda routes.

Glass is today the major consumer of soda ash, and its importance to the merchant market is even greater. Paper industry demand has been damped by the maturity of semi-chemical pulping.

Inroads of caustic soda into what used to be largely soda ash use in the aluminum industry has led to a decline in aluminum's share of the market.

Hydrochloric Acid—Historical growth rate, 8.3 percent a year; last ten years, 5.1 percent a year; future, 5 percent a year. Output in 1965: 1,280,000 tons.

Byproduct output of HCL will gain, largely at the expense of Mannheim furnace operations. End-use pattern is not likely to change over the next few years.

The chemical industry is by far the largest buyer, for such products as vinyl chloride and neoprene, among others. All uses are deemed well-established and not much change is forecast.

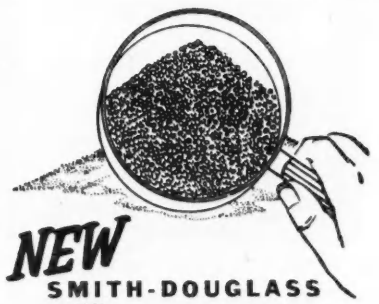
Chemical Foreign Trade

—*Continued from page 4*

dress the country's adverse balance of payments position by a boost in exports.

While the comparatively large amount of dollar holdings abroad does pose a threat to the country's gold supply, the duPont expert reminded the conference that it also represents a potential for expanding exports from the US.

"Provided," he warned, "that we keep our costs under control and can sell abroad at prices which are competitive."



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OPD Reports From Europe

Unilever 'Episode': a $2 Million Tab

—*Continued from page 5*

victims has been "voluntarily paid irrespective of legal liability."

The episode has brought some sad words from George Cole, chairman of Unilever, Ltd. He has told his stockholders that indirectly the price has been possibly more considerable than $2 million.

He notes a decided impact on Unilever sales, particularly in Holland. Margarine turnover generally in the country in the last quarter was off 10 percent from normal, in part, the company believes, because of sales of low-priced storage butter.

But Unilever's share of the smaller margarine market fell by 20 percent, although half this loss has been regained since the start of the current year, reports Mr. Cole.

While awaiting the report of the official Dutch investigation, Unilever set up its own three-man independent investigating committee, headed by a former Socialist Prime Minister of Holland with a director of the Holland-American shipping line and an adviser to the Unilever board of directors.

Mr. Cole says that this committee was given full access to all Unilever records as well as the right to take evidence from any employee of the company.

This group has now recommended a thorough reorganization of the procedure by which Unilever's far-flung subsidiaries and operating units go about introducing new chemicals into food and cosmetics. Basic to the new policy is an abandonment of the Unilever principle of decentralization of such decisions.

Unilever will set up a new central authority for all its operating units which will have the final responsibility in all such matters. This authority will have access to the experience in food and other additives of all the Unilever companies.

Executives were cheered by the independent committee's statement that reasonable care and testing had been carried out before the margarine with the new emulsifying agent was offered to the public.

"In the light of the knowledge available at the time, it is unlikely that any injurious effect, such as is now imputed to the agent would have been discovered, even though the tests had been continued for years," the committee believes.

No Comment on "Scientific Adequacy"

The Unilever independent committee, however, left to other experts, presumably the Dutch government investigation, the question as to the scientific adequacy of the tests made on "New Planta" before introduction.

Final decision on this score will have an impact far beyond Holland, for the whole legal status of testing and approving food additives is in flux throughout the Common Market.

The problems with "New Planta," assuming the additive is finally established as the cause of the skin irritation, came despite tests made by Unilever in conformity with existing Dutch standards over a long period of time.

Some idea of the problems involved can be seen from Mr. Cole's declaration that despite months of intensive medical research since the outbreak, the biological explanation of the skin disorder still isn't known.

DuPont Slashes 'Telar'

Prices of "Telar" antifreeze have been reduced by E. I. duPont de Nemours & Co., Wilmington, Del., to allow a reduction in the suggested consumer price from $5 to $3.95 a gallon.

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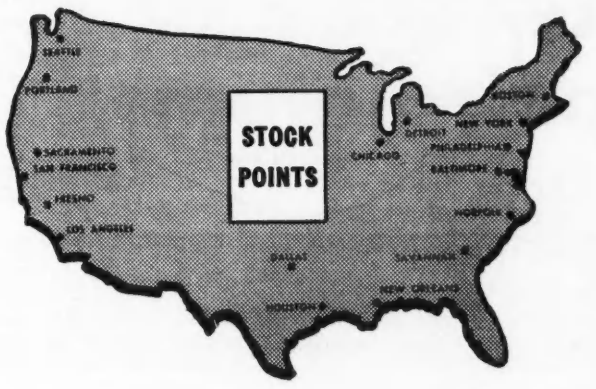

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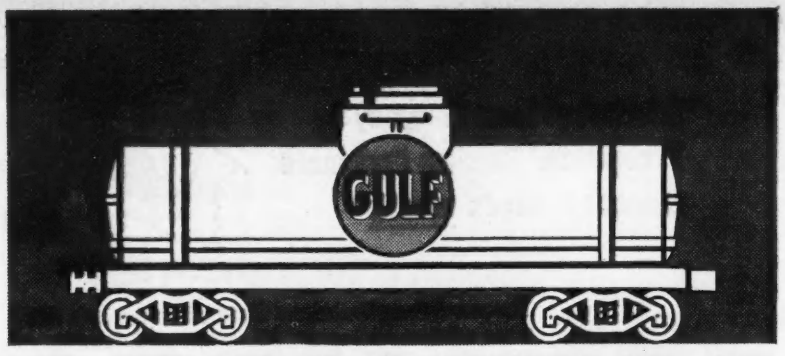

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Petroleum Derivatives

Heavy demand for benzene is reported by trade sources. Calls from virtually all end-use areas have been stepped up in recent weeks. Accelerated pace of demand is in itself nothing remarkable. Even at the bottom of the latest recession demand for available material was intensive, resulting in ultra-firm contract prices and a strict sellers market for spot benzene. What is remarkable now is that spot benzene is becoming available at contract or close to contract price levels. One major producer with benzene to spare reports that he is receiving spot inquiries from customers who wish to beef up their contracted amounts. The benzene supplier indicates he is filling such large-volume spot orders for 34 cents a gallon.

Prices continue to rise for crude petroleum and petroleum products in general although no price changes were recorded in petroleum derivatives last week. Bureau of Labor Statistics places the wholesale price index (1947-49 equals 100) for petroleum and petroleum products at 123.1 for February. January's index was 122.4 while February a year ago was placed at 114.6 by the government agency.

Maintained for June will be an eight-day producing schedule for Texas' regulated oil wells. So said the Texas Railroad Commission at its monthly hearing last Thursday. Crude yield will be up slightly in June compared to May because of an extra calendar day. Most major producers had advised an eight-day schedule although two majors had called for a seven-day rate.

Crude oil production dropped and crude runs increased during the week ended May 5 according to reports received by API from the industry.

Daily average crude output during the week was 7,139,000 b.p.d., a drop of 110,000 bbls. from the preceding week.

Daily average crude runs to stills were 7,878,000 b.p.d., 140,000 bbls. above the preceding week.

Runs of foreign crude amounted to 867,000 b.p.d. during the week, down from 1,010,000 b.p.d. the week before.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 20, 1960
104.10	104.11	103.74	103.82

For Current Prices See Page 9

Aromatic Solvents

Benzene—Heavy demand is reported by producers.

Coming from all areas of benzene consumption the burgeoning requests for raw material are indicative of a general upturn in business outlook.

One major benzene supplier reports consumers are actively seeking spot material to augment contracted amounts.

Fortunately for the consumers they are able for the most part to obtain spot amounts at or near contract prices, a situation all too rare in the past year.

Trade sources predict demand will continue to boom for the rest of the year. Supply will be there to meet it. Price is a question mark. Most sources tend to the theory that the 34c. a gallon contract quotation can only go down—if not soon, then later.

Business and Defense Services Administration has come up with estimates on Brazilian benzene output. Latest figures, for 1959, place benzene production at 5,127 metric tons valued at $309,000. Only two companies are listed as major suppliers.

Toluene—Export and bulk price at the Gulf weakened recently.

Earlier this year toluene was moving into export channels at about 19c. a gallon tops which is considered a good sellers price.

Now, trade sources reveal the price has weakened to 18½c.

Range of toluene prices at the Gulf usually fluctuates between 18c. and 19c. depending on conditions so that the 18½c. level is not cause for alarm.

One producer remarks that toluene supply is beginning to tighten up a bit in the Gulf, perhaps the result of lower prices. It's not known at present what effect "Hydeal" requirements may have had on supply.

Other areas, notably the East, do not reflect any degree of tight supply.

BDSA reports 1959 Brazilian toluene production at 596 metric tons valued at $40,000.

Xylene—Although some increase in solvent application has been noted since auto production picked up earlier this year, the boost in solvent sales has not been great enough to cause widespread enthusiasim among producers.

One seller points out that xylene solvent sales will follow the accelerated auto pace by some weeks so that reports of advanced volume sales of solvent may be expected by mid-June.

Currently the market remains highly competitive with price varying from locality to locality on the basis of peculiar area conditions.

Good demand for orthoxylene because of the shortage of naphthalene has sent more xylene solvent into the market than can be readily absorbed.

Crude Oil Stocks Climb

Domestic and foreign crude petroleum stocks at the close of the week ended May 6 were 367,000 bbls. higher than at the end of the preceding week.

Week ended May 6—252,180,000 bbls.

Preceding week—251,600,000 bbls.

This increase comprises an increase of 367,000 bbls. in stocks of domestic crude and an increase of 213,000 bbls. of foreign crude.

(Source: Bureau of Mines)

Waxes

As one producer puts it, the wax market is in a state of flux. In recent years volume of traditional applications has been slipping gradually. Research into new applications was at a standstill.

Along with this came increased competition for markets from within the wax industry and also from without as in the case of persistent attempts on the part of plastics manufacturers to snag a segment of the trade.

Result has been that crude scale and refined paraffin have not been overly strong for at least the last year. Price stability has not suffered unduly, producers report, although spot weaknesses have been noted.

To protect and enlarge their market, wax producers are beginning to invest more money in research to improve and widen application of wax.

Production, exports and stocks of petroleum-derived waxes increased in February while demand dropped according to latest reports.

Production climbed to 481,000 bbls. (1 bbl. equals 280 lbs.) after February output of 475,000 bbls. Production for the first two months of 1961 ran 2.6 percent ahead of the same period last year.

Exports gained 9,000 bbls. to a total of 108,000 bbls. for February. For the period January-February, however, exports were slightly behind the same period last year —207,000 bbls. to 209,000 bbls.

Stocks mounted to 894,000 bbls. during February after hitting the level of 881,000 bbls. in January.

Only category showing a decline was domestic demand which fell 11 percent to 360,000 bbls.

Miscellaneous

Exports of petrolatum and petroleum jelly totaled 6,509,502 pounds in March valued at $551,438.

Major shipments were made to:

United Kingdom—816,270 pounds valued at $65,258.

Philippine Republic—504,457 pounds valued at $44,328.

Indonesia—439,100 pounds valued at $32,405.

W. Germany—412,100 pounds valued at $38,460.

Aliphatic Organics

Pentaerythritol prices have been cut 2 cents a pound across the board. Initiating the change on May 18, a major producer stated that "volume demand and lower production costs at its integrated 30-million-pound plant in Louisiana, Missouri, made possible the price reduction." Not everyone in the trade accepted this explanation as the whole story, however, for two very good reasons: First, the recent 2¼ cent a pound drop in glycerine on top of a late December decline of 2 cents; and, second, the shakiness of the old PE pricing structure due to the competitiveness of the market.

Glycerine and PE-glycol combinations compete for an estimated 6 million pounds of alkyd business in which costs primarily determine which product manufacturers will use. And at the lower levels posted May 1, reportedly, glycerine had a decided advantage in this area.

In addition to being a competitive move to counter the advances of the glycerine trade, the PE change was probably an attempt to stabilize prices. Reports from trade members indicate that competition and consequent price sniping had weakened the market to such an extent that a firming-up action, via an announced lower schedule, was undoubtedly required.

Both mono- and technical PE are now quoted at 29 cents a pound in carloads of bags, off 2 cents. As initiated, however, the reduction in mono was 1½ cents, making the quote 29½ cents a pound, but in following the move a competitive maker lopped off an additional ½ cent. Similarly reduced, west coast prices are 1 cent higher, the traditional differential.

Acetone—Threat of additional acetone production and increased competition in this market is inherent in the cumene expansion slated by a petrochemicals firm last week.

Capacity of the new facility, due on stream early in 1962, is estimated at 165 million pounds annually. This much cumene could account for an additional 97 million pounds of phenol and 58 to 60 million pounds of acetone.

Where is all this material going? Speculation is that the new cumene producer does not intend to manufacture phenol itself, but plans either to participate in a joint production venture or to sell its cumene to a firm that is today a large open-market buyer of phenol and acetone.

The firm most frequently cited as the likely partner or buyer is currently turning out nonyl and octylphenol; in addition, uses acetone chemically in the manufacture of polymethyl methacrylates and as a solvent for acrylic resins.

If speculation pans out, little or none of the additional phenol or acetone supply will hit the open market—directly. However, one or more firms are going to lose some business and will necessarily be scouting around for new accounts. In the process, competition is bound to stiffen and this may lead eventually to a still lower price on acetone.

Butadiene—Two new butadiene-derived hydrocarbons are now available in research quantities. They are: 1,3-cyclooctadiene and 1,5,9-cyclododecatriene.

Potentially useful in the manufacture of coatings, adhesives and reinforced plastics, 1,3-cyclooctadiene is obtained by catalytically rearranging the double bonds of 1,5-cyclooctadiene, which, in turn, is obtained by dimerization of butadiene.

The conjugated arrangement of the double bonds of the new compound is expected to give it a unique reactivity, allowing new uses not possible with an unconjugated diene.

The 1,5,9-cyclododecatriene — predominately the all-trans isomer—is made by cyclic trimerization of butadiene, using a new type of catalyst, the producer reports.

Business & Defense Services Administration of the Commerce department has revised 1960 world rubber statistics, its original report was excerpted in this space on April 24. Here are the up-to-date figures.

Excluding production and consumption for Iron Curtain countries, world synthetic rubber production for 1960 totaled 1,887,500 tons and consumption 1,780,000 tons (revised), while in 1959 the figures were 1,640,000 tons and 1,575,000 tons, respectively.

World consumption of natural and synthetic rubber totaled 3,765,000 tons for 1960 compared with 3,687,500 tons (revised) in 1959. Consumption in the US decreased 4.5 percent from 1,627,770 tons to 1,554,368 tons, while consumption in foreign countries, excluding Russia and Red China, increased 15.1 percent (revised) from 1,682,230 to 1,935,882 tons (revised).

Corn Syrup—Prices for corn syrup were dropped 35c. per cwt. on May 13, thereby establishing the schedule that has actually been in effect—via an equivalent special allowance—for three months prior.

A major market, the confectionery industry, used 800 million pounds of corn syrup in the manufacture of 3 billion pounds of candy, in 1960.

In addition, corn syrup solids and nearly 44 million pounds of dextrose (refined corn sugar) were used by the candy makers last year, according to the Corn Industries Research Foundation.

Corn syrup is widely used by confectioners, reportedly, because of its unique ability to retard the crystallization or "graining" of other sugars—once a serious problem in candy making—and being mildly sweet, doesn't mask the essential flavors or fruits and other ingredients.

Confectioners used dextrose either to supplement a corn syrup or as the sole corn sweetener. Being identical with the sugar of human blood, dextrose needs no conversion and hence supplies energy almost immediately upon intake. All corn syrups contain it in various concentrations.

Ethanolamines — February production of ethanolamines, at 11,232,858 pounds, was approximately 2 million pounds higher than the January level—and one of the few gains recorded by Tariff Commission statistics for that month.

Figuring in the rise in output, one may reasonably assume, was the substantial increase in sales of synthetic detergents, which account for an estimated 40 per-

Price Trends

Advanced

None

Reduced

Monopentaerythritol, 2c. per lb.
Pentaerythritol, tech., 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 20, 1960
130.29	130.33	130.48	132.19

For Current Prices See Page 9

Aliphatics Foreign Trade: March

Exports of selected industrial aliphatic organics for the months of February and March, 1961, as reported by the Bureau of Census, were as follows:

		March	February
Acetone	lbs.	703,867	512,399
Alcohols, including, glycols, n.e.c	lbs.	10,240,021	15,517,958
Butyl acetate	lbs.	4,976,635	2,783,686
Butyl alcohol	lbs.	7,075,730	6,850,552
Carbon bisulfide	lbs.	228,528	257,300
Carbon tetrachloride	lbs.	17,232	46,700
Ethyl alcohol	gals.	2,520	6,535
Ethylene glycol	lbs.	4,546,956	5,126,499
Formaldehyde, 40 percent solution	lbs.	[illegible]	635,270
Glycerine, crude and refined	lbs.	993,198	789,519
Methyl alcohol	gal.	1,513,819	370,106
Methyl ethyl ketone	lbs.	1,116,825	500,496
Propyl alcohol	lbs.	614,659	2,388,044

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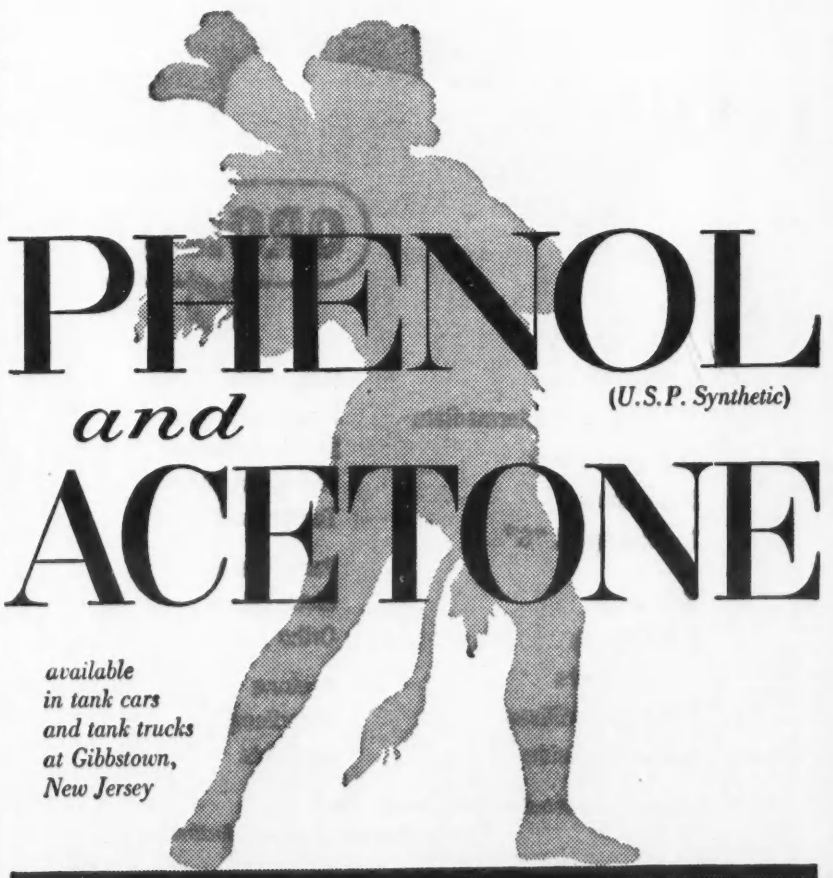

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Aliphatic Organics

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According to the Association of American Soap & Glycerine Producers, sales of synthetic detergents totaled 858,277,000 pounds and $206,233,000 in the first quarter of 1960. These figures represented gains of 3.9 percent in volume and 2.6 percent in value over the corresponding period in 1960.

First quarter '61 sales of solid syndets amounted to 661,633,000 pounds and $143,623,000, as against 660,542,000 pounds and $144,123,000 for the like period a year earlier.

Sales of liquid syndets were 180,640,000 pounds and $56,256,000, up 13.8 percent in volume and 10.1 percent in value from first quarter '60.

Soap sales amounted to 243,800,000 pounds and $72,398,000, compared with 256,022,000 pounds and $74,844,000 in first quarter '60.

Glycerine—Glycerine producers held stocks totaling 63.5 million pounds on April 1, 2.9 million pounds more than inventories a month earlier. Accounting for the rise, in face of a 3.6 million pound increase in disappearance, was the giant surge in imports on top of greater domestic output.

Production in March was 24.6 million pounds, up from 22.2 million in February. Added to this were imports of 3.1 million pounds, up from 800,000 pounds. Exports, at the same time, were 1 million pounds, also up from 800,000 in February.

Disappearance of glycerine in March was 23.8 million pounds, compared with 20.2 million the month before. First quarter disappearance totaled 65.2 million pounds, against 71.1 million in the corresponding period in 1960.

Cumulative production for the first quarter of '61 was 69.5 million pounds, down from 78.4 million in the comparable period last year.

Glycerine stocks, at 63.5 million on April 1, were only 42 million a year earlier.

Isooctyl Alcohol—Isooctyl alcohol was reduced 3c., to 18c. a pound in tankcars, on May 10. The announcement of the change was followed immediately by a 3¼c. cut in 2-ethylhexyl alcohol, a competitive chemical which is now quoted at the same levels but which had been quoted ¼c. higher.

In related actions, producers cut prices for decyl, hexyl and tridecyl alcohols and derivative plasticizers (adipates are now 4c a pound lower, phthalates, 2c.).

Glycerine Correction

A price reduction in glycerine of 2¼ cents a pound was incorrectly reported in the May 1 issue of OIL, PAINT & DRUG REPORTER as 2½ cents a pound.

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Potash Deposits in Utah to Add 1.1 Million Tons to US Capacity

Potash deposits in Utah, reportedly the richest in the nation, are expected to add 1.1 million tons to present US capacity, bringing combined US and Canadian productive capacity to almost 6 million tons a year by 1963. Demand during the same period is seen rising to more than 5.5 million tons in North America; providing producers with a neatly balanced market.

This is the cheering report from the company whose Utah-based potash operation is expected to start production in late 1962.

Drilling at the site near Moab, Utah, is proceeding on schedule. As of last week the mine shaft had reached the eighty-foot level. Completion of the permanent head frame is expected by June 1.

None of the expensive problems that plagued Canadian mining efforts (i.e., bad ground and water) have cropped up at the Utah site, the company reports. Favorable location of the Utah mine is also expected to provide an edge for the US producer over Canadian potash.

Quality of the Utah Potash

The quality of the Utah ore deposits has been pegged at about 25 percent K_2O, or roughly the K_2O percentage of the prewar Carlsbad, N.M., ore. In recent years, the K_2O percentage of Carlsbad ore has slipped to around 18 percent, causing some concern about the future for potash in that area.

The added capacity in the US and Canada should give producers in North America an even bigger slice in the export market. Foreign exports to this country, however, are not expected to change appreciably in the next few years.

One potash importer feels that the added capacity will not make his job difficult. His only worry is over a possible shift in overseas demand which would tend to keep the currently imported potash closer to home.

French potash capacity, for example, is rapidly reaching its limit, as the French attempt to pace the demand for potash in their home markets. With free-world demand for potash expected to double in the next fifteen years, exporting countries such as France may turn to importing potash to meet their requirements.

While the long-term market for potash seems to indicate a very healthy future, the status of the market at present can only be termed disappointing. An abnormally wet spring, and the effects of the administration's grain bank program is reported to have reduced shipments drastically.

Department of Agriculture reports that it under estimated the amount of land to be retired from corn production by about 10 percent. Not everyone in the trade agrees that the grain bank program has adversely affected fertilizer shipments this spring. Since many farmers tend to compensate for retired acreage by increased use of fertilizer on productive land.

Nearly everyone concedes that the wet weather in the last month has cost fertilizer producers a considerable slice of business in postponed direct application fertilizer sales.

For the first three months of the year, deliveries of potash in the US, Canada, Cuba and Puerto Rico increased ten percent over the same period in 1960, according to the American Potash Institute.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 20, 1960
111.70	111.70	111.65	109.97

For Current Prices See Page 9

Animal Proteins

Land retirement under the administration's feed grain program continues to rise, the USDA reports. As of May 5, some 12.25 million acres were signed up under the 1960 program.

This acreage will be diverted from corn and grain sorghum plantings on 55,623 farms this year. Corn and grain sorghum plantings on these farms averaged nearly 30 million acres for the crop year 1959-60.

USDA reports that an increase of 4.7 million acres from 7.5 million acres recorded at the end of the April 28 period. Some 11.0 million acres of corn will be diverted from 27,078,971 acres of corn base established for farms signed up. For grain sorghums, 1,180,412 acres will be diverted from 2.8 million base acres on farms signed up.

Sign ups will continue for another few weeks and while some tapering off is expected, the current rate of sign ups gives reason to expect about 18 million acres to be finally taken out of corn, an upward revision from earlier estimates.

Ammonium Sulfate—Market conditions are basically unchanged. With a boost in steel's operating capacity reported in the last few weeks, corresponding improvement in cokeoven supplies are anticipated.

March imports of ammonium sulfate totaled 35,701 short tons, reports the Census Bureau. For the previous month, inshipments of sulfate were reported at 16,277 short tons.

During March, ammonium sulfate imports came from Canada with 25,878 short tons, and the Netherlands with 9,823 short tons. Value of shipments was reported at $1,289,319.

Sodium Nitrate—Chilean shipments of nitrate to this country are moving in greater volume than usual due to a strike, since settled, that caused a temporary curtailment in shipments here. The result has been an unusually high rate of nitrate imports. In March, imports of sodium nitrate totaled 53,234 short tons, while in February imports were reported at 58,774 short tons.

Farm Chemicals Imports: March

Following are data compiled by the Bureau of Census indicating volume of imports of agricultural chemicals for March and February 1961. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. All figures are in short tons.

	February	*March*
Ammonium nitrate (over 32 percent N)	11,493	20,132
Ammonium nitrate (32 percent N or less)	4,129	33,452
Ammonium phosphate	9,696	10,277
Ammonium sulfate	16,277	35,701
Calcium cyanamide	2,791	5,225
Castor bean pomace	1,102	1,317
Dried blood	423	206
Fishmeal and scrap	4,589	7,282
Guano	16	43
Nitrogen Solutions	3,750	7,113
Peatmoss (fert. grade)	19,038	40,777
Phosphates, crude[2]	8,254	20,349
Potassium chloride, crude	49,968	49,894
Potassium nitrate, crude	181	(—)
Potassium sulfate, crude	4,217	11,106
Sodium nitrate, crude and refined	58,774	53,234
Urea	8,603	11,683

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Coal Chemicals

Going up in Philadelphia is a giant benzene-cumene complex. On stream in New Jersey is a new maleic anhydride plant. At Corpus Christi a paraxylene plant is planned pegged at 15 million pounds-a-year. That's a summary of the latest chemical expansion news. Slated for completion early in 1962, the benzene-cumene units are rising on the site of a major oil company's refinery. Benzene and propylene raw materials for the cumene process will be supplied captively. Major products of the cumene plant will be phenol and acetone. While cumene capacity figures have not been released, the company claims the new unit will be one of the world's largest. Some trade sources in fact say the new plant will far exceed the 70 million pounds credited to a New Jersey plant as the current world's top cumene capacity. Basing their figures on the producer's claim that the new cumene plant will be able to turn out raw material to make 200 billion five-grain aspirin tablets, trade observers have estimated the amount of cumene necessary to provide starting material for that amount of aspirin and have come up with a figure of 165 million pounds.

On stream at Fords, N.J., last week came yet another maleic anhydride plant. Producer-rated at 24 million pounds-a-year, the plant joins two other new plants which made their debuts earlier this year. While the maleic field is bristling with capacity, producers appear confident that demand will be extended in the next few years to meet the burgeoned production facilities.

Construction contract let last week for a 15 million pound-a-year paraxylene unit at Corpus Christi calls for completion early next year. Entire output has already been spoken for by a European source. So says the owner, a major oil producer, whose recent interests have been concentrated in separation of xylene products.

Coke production jumped 11 percent in March. With this major increase, due to accelerated steel rate, came a rise in output for virtually all coal chemical materials reported on by Bureau of Mines in its monthly bulletin. Only nitration grade benzene and industrial grade toluene displayed losses and they were marginal declines at that.

Stocks generally declined with greatest depletions noted in tar acid oil, 42.9 percent, and industrial grade toluene, 23.3 percent.

Production of steel in the week ended May 13 was 1,983,000 net tons, an increase of 2.3 percent over the previous week.

Based on assumed 1961 steel production capacity, rate of production for the week was 68.9 percent of capacity.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1960
117.63	117.63*	117.51	118.40

* Revised.

For Current Prices See Page 9

Basic Products

Coal Tar—Along with the general increase in production for coke oven materials in March, crude coal tar output rose 11.4 percent.

Bureau of Mines reports March production at 46.2 million gallons, up from the 41.5 million gallons recorded in February.

Although far behind the 75.8 million gallons turned out in March of last year, the stepped-up pace of steel mills should bring crude coal tar production close to last year's level by the end of the quarter.

Naphthalene—Nearly 6 million pounds of imported naphthalene arrived at US ports last week.

Largest volume, 3,942,840 pounds, arrived in a single shipment at Philadelphia from Poland.

Dutch shipments totaled 1,519,860 pounds, arriving in New York.

One Belgian shipment arrived in New York totaling 247,060 pounds.

West Germany accounted for 240,240 pounds, all of which arrived in New York.

Tar Acid Oil—Sales of crude chemical oil in March showed the greatest percentage gain—62.5 percent—of any crude material.

Reported sales of 2.4 million gallons is a million gallons higher than February and compares favorably with March 1960 when sales of 2.8 million gallons were recorded.

Production hit 2.1 million gallons in March, a gain of 13.5 percent, while stocks plummeted 42.9 percent to a total of 485,181 gallons.

Intermediates

Cumene—A mammoth benzene-cumene complex is being constructed at the Philadelphia refinery of a major oil company. Target date for completion is early next year.

While the producer does not reveal the cumene capacity, except to say the unit will be among the world's largest, there is evidence that the unit may well be just that—the world's largest.

On the basis of the producer's estimate that 200 billion five-grain aspirin tablets could be turned out by the plant, trade sources place the cumene plant's capacity at 165 million pounds annually. Largest extant cumene unit went on stream last summer at a nearby New Jersey site with a capacity of 70 million pounds.

Phenol and acetone will be the principal products of the cumene unit. Phenol's intermediate role is in the production of plastics, nylon, adhesives and pharmaceuticals. Acetone is used as a solvent in the production of acetate plastics and fibers.

In terms of consumer products the new cumene plant, if devoted entirely to nylon production, could turn out over ten million car tires annually. If phenolic resins were concentrated on exclusively, some two billion square feet of plywood could be bonded. Also, if converted to salicylic acid, the new plant's output could provide 100 five-grain aspirins per year for each of the world's two billion people.

Durene—A major oil refiner is offering developmental quantities of durene at the less than carlot drum price of 49c. a pound.

Also known as 1,2,4,5 tetramethylbenzene, durene applications as proposed by one producer include use as an intermediate in the manufacture of fibers, films, plastics, dyes and protective coatings.

Maleic Anhydride—On stream last week went still another maleic plant. The third such plant to be started up this

Cokeoven Output: March

The following statistics indicate production of selected coal chemicals as reported to the Bureau of Mines by cokeoven plant operators. Benzene statistics do not include motor benzol. All figures are reported in gallons.

	March 1961	*March* 1960	*First Three Months* 1961	*First Three Months* 1960
Benzene, nitration	5,898,585	11,634,285	17,752,374	34,047,422
Industrial pure	2,670,332	4,236,672	6,692,894	11,594,773
Industrial 90 and other	155,225	211,020	408,869	606,507
Coaltar, crude	46,239,420	75,855,536	131,253,776	221,748,823
Chemical oil, crude (tar acid oil)	2,051,794	2,735,821	5,983,507	8,598,166
Solvent naphtha, crude and refined	397,458	477,571	985,568	1,349,650
Toluene, nitration	1,718,665	2,662,689	4,931,258	7,544,676
Industrial pure	336,585	580,048	1,090,697	1,647,246
Xylene, all grades	648,857	679,873	1,740,231	2,193,513

Coal Chemicals

year, the new unit is located at Fords, N. J., and has a producer-rated capacity of 24 million pounds a year.

Maleic capacity has increased by 64 million pounds thus far this year with an estimated 30 million more pounds due before the year is out.

Other additions in the first quarter were made at Neville Island, Pa.—20 million pounds—and Richmond, Calif.—also 20 million pounds.

What's remarkable is that this year's capacity additions fall only 15 million pounds short of total 1960 demand. Producers are betting that demand, both captive and merchant, will prove their new plant investments to be wise choices.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended May 13, were as follows:

Ammonia liquor	lbs.	594,734
Ammonium sulfate	lbs.	25,315,478
Benzene	gals.	2,726,800
Coaltar	gals.	13,757,436
Crude chemical oil	gals.	538,627
Solvent naphtha	gals.	89,771
Toluene	gals.	605,956
Xylene	gals.	168,321

Phthalic Anhydride—Recent reduction in phthalate prices was the result of cuts in alcohol quotations and do not represent any weakness in phthalic price according to trade sources.

Naphthalene supply shortage still plagues phthalic makers. Ortho continues to be run in production lines to beef up naphthalene supplies.

Phthalic customers are building inventory according to one supplier. This is a switch from the trend of thinking at the height of the recession when minimum inventories were the order of the day.

Pseudocumene—A major oil refiner reports carlot quantities of this material are now available.

Pseudocumene, or 1,2,4 trimethylbenzene, is priced at 13c. a pound in drums, carlot amounts. Less than carlot amounts are quoted at 14½c. a pound.

Suggested end uses for pseudocumene include preparation of intermediates for oil-soluble alkyd resins, polyesters, plasticizers, fibers and films and as a raw material for dyes according to the producer.

Sulfur Projection

—*Continued from page 7*

by June 1. Mr. Stephens said he expects the potash project to add "at least $5 million to the company's income."

The Texas Gulf president went on to report these other company developments:

• Discovery of an important new gas field in the Wildhorse Creek region of Alberta, Canada.

• Discovery of "what may be a major lead-zinc deposit in the Canadian Arctic, which our crews will continue exploring over the next two summers."

• Entry into a joint research venture with International Nickel Company at Sudbury, Ontario, for the recovery of "potentially large tonnages" of sulfur from smelter gases.

• Investigation of a lithium deposit in North Carolina, "which does not look very promising at this time."

FTC Boss Warns

—*Continued from page 7*

been an inclination to ignore unfair practices and to proceed only against those which are deceptive," Mr. Dixon went on.

"Long ago the Supreme Court ruled that practices not involving fraud or deception may be lawful because they are unfair. Today we are faced with unfair practices which affect the American public as seriously as deceptive ones.

"We intend to apply the test of fairness as well as deception to advertising practices in order to afford as much protection as possible to the public and to fair and honest competitors."

Mr. Dixon then pointed to what he called an "important problem" in the area of fair advertising: "Some manufacturers of drugs bearing labels which include warning statements make affirmative claims of safety in advertising them, which tend to minimize or contradict the warning on the label. It is not unlikely that such advertising will cause some individuals to misuse these drugs to their detriment. Also, some may purchase them in reliance upon the safety representations in the advertising, but find, when they are unwrapped at home, that their label bears contradictory warning statements which should preclude their use."

Kefauver's Tactics Viewed

Joel Y. Lund, president of the Proprietary Association, commented extensively on the Kefauver committee, saying that "there has been a good deal of criticism of the 'publicity-seeking' tactics of the committee, but let's remember that the success of any political activity depends very largely on the publicity it receives."

"We have found that such practices pay off in industry also," he went on, "so let's recognize the facts as they are and adjust ourselves to meet them."

Mr. Lund said that while the Kefauver hearings into drug prices were aimed at the prescription drug manufacturers, there may be "side-effects which will affect everyone concerned with the occupation of helping or improving the health of our citizens—doctors, pharmacists, consulting laboratories, manufacturers of both prescription and over-the-counter drugs."

Philadelphia Drug Men to Meet

Philadelphia Drug Exchange will hold its spring outing June 7 at the Overbrook Golf Club in Bryn Mawr, Pa.

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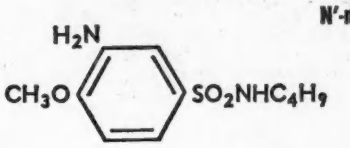

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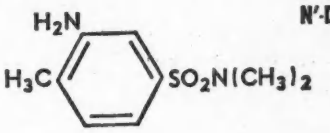

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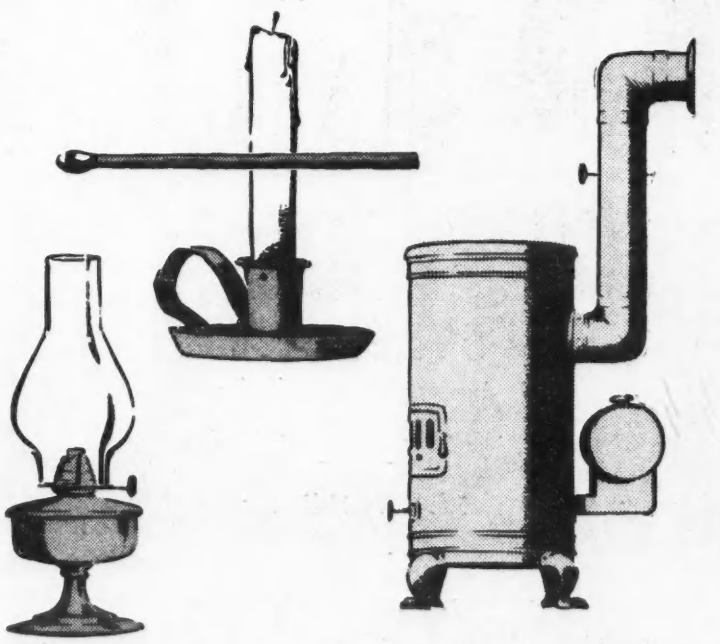

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CLINTBROOK CHEMICALS

Drugs, Fine Chemicals

Two producers of ascorbic acid engaged in a price war on a limited scale last week with the result that the vitamin is now quoted at $6.35 a kilo in 100-kilo lots, 45 cents below the former schedule. As initiated on Tuesday (May 16), the cut amounted to 35 cents a pound, but the following day, a competitor, not content just to follow along, dropped prices an additional 10 cents. Reduced at the same time were sodium ascorbate, erythorbic acid and sodium erythorbate.

The changes were originated, it's believed, in face of greater competition from a domestic maker whose recently-completed ascorbic facility is now fully operational. And with appreciably more material to sell, an eye on steadily expanding markets and a potentially big new end-use under development, this firm, in turn, decided to one-up its competitor with the $6.35 quote.

Ascorbic acid prices have been dropped in successive stages over the past few years, and each change, reportedly, has opened up new markets. At the outset, the vitamin was used in very small quantities in foods—and then primarily for its anti-oxidant activity—but today this is a steadily expanding end-area.

Frozen fruits, jams, beer—all are markets for ascorbic as an anti-oxidant. Canned fruit juices, on the other hand, contain vitamin C for its health-giving properties—not to mention its effectiveness as a sales booster.

Some sources believe that the market will continue to expand in foods because of the lower prices just posted. They note, for example, that the cost of beverages, generally, has not risen parallel with the uptrend in manufacturing costs and that this fact has discouraged the use of "C" in these products.

About that new end-use. A usually well-informed, reliable trade source says that industrial markets for ascorbic are a good possibility. Watch for developments, he adds.

Antibiotics—Except for the rise in the price of streptomycin, reported several weeks ago, there have been few developments of particular significance in the overall antibiotics market.

Food & Drug Administration, of course, finalize rulings on the relabeling of DHS early this month, but as this was generally expected by trade people, it has not had any further adverse effect on the market.

Demand for penicillin has tapered off domestically and in March, according to statistics issued last week by the Commerce department, imports also fell off.

Neomycin, which was reduced from 5c. to 7c. a gram last fall, is stable at prices established at that time, reportedly. Cosmetic interest is good and further developments are looked for in this area by some trade people.

Butyl Stearate—Higher cost of stearic acid has forced producers of a derivative chemical, butyl stearate, to advance prices correspondingly. Change was put through on May 1.

CP butyl stearate is now quoted 1¼c. a pound higher, at 26½c. a pound in tank-car lots, while the technical grade is up 1½c., at 23¾c. a pound.

Caffeine—Domestic caffeine prices were boosted in early March and the same month imports nearly doubled—in anticipation, perhaps, of the major cola-consuming season.

According to statistics published by the Commerce department, inshipments of caffeine were 178,649 pounds in March, up from 96,138 pounds in the previous month. Suppliers were: West Germany 64,959 pounds, valued at $109,726 and dutied at $33,127; United Kingdom 64,190 pounds, valued at $158,926 and dutied at $32,734; and France 49,500 pounds, valued at $114,748 and dutied at $25,245.

Price Trends

Advanced
None

Reduced
Ascorbic acid, 45c. per kilo.
Sodium ascorbate, 45c. per kilo.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1960
59.27	59.29	59.29	60.36

For Current Prices See Page 9

Cortisone—March exports of cortisone were valued at $159,899. Largest shipments, based on worth, went to Bermuda $68,738; Turkey $19,000; Cuba $4,060; and Panama $2,160.

Hydrocortisone exports in March were worth $158,157, Census reports. On the buyers roster: West Germany $36,000; Canada $27,546; Bermuda $10,661; and Panama $6,628.

Domestic market for both cortisone and hydrocortisone is relatively active with prices unchanged from the low levels reported for the last several months.

Iodine — Rise in imports of crude iodine from Japan have not disturbed either domestic or Chilean suppliers because the bulk of the material has not been hitting the commercial market.

According to usually well-informed, reliable sources, the bulk of the Japanese iodine entering the US is going to the government for stockpile needs.

Japanese shippers apparently were the low bidders for the government business. Furthermore, it's believed that some sort of barter arrangement was worked out whereby the government is trading surplus agricultural commodities for iodine.

Prednisone—Exports of prednisone in March were valued at $152,599. Destination of major shipments: Panama $74,313; Belgium $44,145; Switzerland $21,000.

The same month, prednisolone exports were valued at $1,010,966. Material went to: Panama $140,191; Belgium $123,426; West Germany $110,579; Italy $76,790; Bermuda $494, and other countries around the world.

Saccharin — A domestic producer advanced saccharin prices 10c. a pound on spot midway through March (April 1 on contract), and related or not to this development, imports increased.

According to Commerce department statistics issued last week, March imports of saccharin amounted to 25,617 pounds, up from 22,290 in February. Back on the scene after a brief absence were Dutch shippers, who accounted for 4,000 pounds of the total. The remainder (21,617 pounds, valued at $30,791 and dutied at $6,499) came from Japan. Entire shipment was valued at $38,850 and dutied at $8,150.

The increase in saccharin prices is thought to be related to the fact that sodium and calcium cyclamate production has been halted by a one-time major

—*Continued on page 46*

Drugs and Fine Chemicals Exports: March

Exports of selected drugs and fine chemicals for the months of February and March, 1961, as reported by the Bureau of Census, were as follows:

		March	*February*
Analgesics and antipyretics	lbs.	144,814	34,187
Antibiotics, bulk & dosage, forms, n.e.c.	gms.	14,832,067	11,236,639
Ascorbic acid	lbs.	88,106	73,770
Aspirin	lbs.	278,873	140,761
B-complex (excluding B_1 and B_{12})	lbs.	38,672	33,306
Bacitracin	100-million-units	2,781	2,782
Dihydrostreptomycin, bulk	gms.	7,478,713	9,030,600
Pectin and preparations	lbs.	56,392	30,566
Penicillin, bulk	billion units	10,125,762	12,344,788
Streptomycin, all forms	gms.	8,225,953	14,477,123
Sulfa Drugs	lbs.	59,784	191,563
Thiamine	lbs.	14,959	3,327
Vitamin A bulk, medicinal	lbs.	13,845	10,679
Vitamins, bulk, n.e.c.*	lbs.	72,677	70,388

* Not elsewhere classified by the Census bureau.

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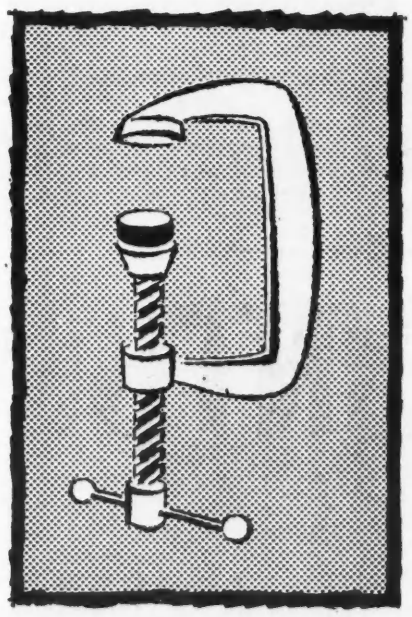

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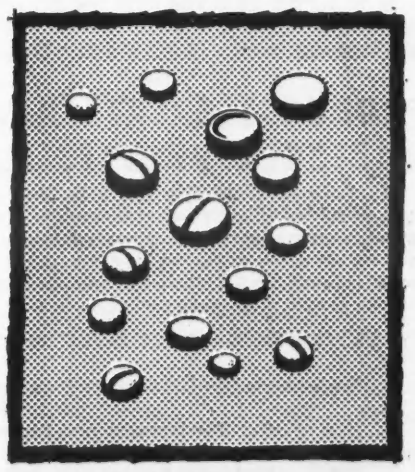

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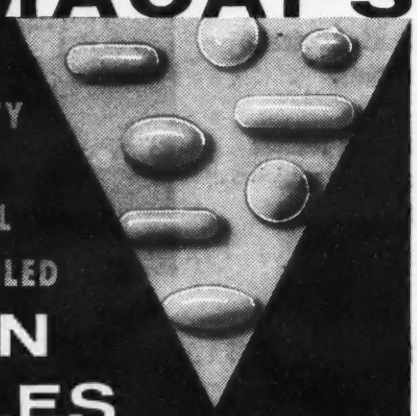

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Drugs, Fine Chemicals

—Continued from page 44

producer. These products are non-caloric sweeteners and saccharin competitors.

Vitamin B_{12} — March exports were valued at $70,312. Major buyers, according to the Commerce department, were: Canada $47,786; Uruguay $4,275; Indonesia $6,800; Philippine Republic $3,880; Japan $1,530; Finland $1,210; and Chile $1,678.

Shipments worth less than $1,000 went to Cuba, Colombia, Brazil and West Germany.

Botanicals

Locust Bean Gum—Locust bean gum imports during the first eleven months of 1960 were 24 percent less than in the corresponding period a year earlier. And, according to BDSA, it is not likely that the calendar year 1960 equaled 1959.

Statistics for the last several years, the agency adds, indicate that locust bean gum is not recovering its mid-1950 position.

Soapbark—Higher replacement costs recently occasioned an advance in spot prices. Now quoted is this schedule: whole bark, 25c. a pound; crushed, 35c. a pound; powder, 40c. a pound.

Witch Hazel Leaves—Scarcely any material is available so the 75c. to 80c. quotation is considered nominal. New crop bark should be available shortly but the leaves won't be available until later.

Drug & Fine Chemical Briefs

ABBOTT SETS UP DIVISION: Abbott Laboratories, Chicago, has established Lako Products Division to market "Sucaryl" to the food trade. Since 1950, the non-caloric sweetening agent has been promoted exclusively through drug stores, but aggressive national competition is forcing Abbott to move into supermarkets.

AYERST GROWING: Ayerst Laboratories, New York, has expanded its Chicago distribution and office facilities, the third such expansion since 1950. Its new, modern structure, located in the suburb of Niles, provides 18,000 square feet of space, about two and one-half times the size of the previous center.

LILLY BUILDING: Construction of a 60,000-square-foot building will begin in June at Eli Lilly & Co.'s Greenfield, Ind., laboratories. The new facility will centralize toxicological studies of new products. To cost between $2.5 and $3 million, it is scheduled for completion in the summer of 1962.

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Essential Oils, Aromatics

The $1 per pound drop in the price of cassia was the only significant price change among the essential oils last week. Both Brazilian and Peruvian bois de rose are said to be weak as are peppermint and spearmint. Vanilla beans remain stable and no further price advance is noted in sandalwood which continues quite firm. No changes are reported among the aromatic chemicals and no substantial ones among the seeds and spices. This lack of pricing activity is attributed to the fact that many brokers, dealers and users have been attending the various conventions devoted to the study of flavoring and perfuming materials held recently in New York.

Price Trends

Advanced
None

Reduced
Cassia, $1 per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 20, 1960
143.79	143.81	143.78	145.50

For Current Prices See Page 9

Statistics show that America's per capita consumption of candy was 17 pounds per year in 1960 as compared with the all-time high, 20.5 pounds in 1944.

Historically, man's taste for sweetness goes back at least 40 centuries. In 2,000 B.C., the Egyptians had a well-established confectionery art, using bees' honey as the basic sweetener and adding flavors, spices and herbs.

Drawings on temple walls and on crumbling rolls of papyrus depict candy-making processes. Inscriptions on the tombs of Tutankhamen and Rameses III confirm the earlier drawings and add details which show refinements in the candy maker's art.

The Persians and Arabs called one of their delicacies, "kand." This was a favorite with the soldiers of Alexander the Great. It was a chewy sweet reed, gooed with honey, spices and coloring. The Arabs brought Asian sugar cane westward, contrived a sugar-refining process and made lozenges by mixing powdered sugar with gum arabic.

Licorice, one of the traditional candy mainstays, was used first as a medicine. The ancient Chinese believed that licorice preserved youth, strength and virility. The Brahmans of India had similar ideas, esteeming licorice as a tonic and even a beautifier. The Greek philosopher Theophrastus who was a pupil of Aristotle, prescribed licorice for asthma and coughs, as a healing aid for wounds, and as a thirst-quencher for troops on the march.

Candy has been traditionally useful in the practice of medicine. Physicians who doctored the ancients used honey to mask the bitter taste of various potions. This custom persists in today's candy-coated pills.

The confectionery trade as such was slow to make any headway in the New World. Sugar was scarce in the pre-Revolutionary Colonies, and diets had a Spartan simplicity.

Resourceful New England housewives allayed the craving for sweets with a confection made of native ingredients —maple syrup and nuts. The Indians helped by teaching the white settlers to identify certain flavorful plants such as wintergreen, peppermint, the bark of the sassafras tree, and the roots of ginger and iris.

Essential Oils

Bois de Rose—The market for Brazilian and Peruvian material is said to be soft.

Trade sources estimate that Brazil's 1959 production of rosewood was 550 metric tons. The value of this material is said to be $2,587,000.

Prices remain at their previous levels. Brazilian material continues to sell for $2.05 per pound and Peruvian material continues to sell for $1.65 per pound.

Historically the market for bois de rose weakens in the springtime. The logs are cut sometimes hundreds of miles from the distilleries and the only economic way to transport them is by water.

The creeks and rivers are low—some even dry—during many months of the year. So it is only during seasons of heavy rains and floods that are high enough to transport logs.

In Peru the flood season is usually in the middle of May. Oil production follows close behind.

This same situation is true with Brazilian bois de rose, too. The high water season for the Amazon River and its tributaries does not occur until the middle of June.

Therefore, Brazilian wood is not plentiful until a little later.

Brazilian oil is almost always more expensive than Peruvian oil. Brazilian oil is said to be very popular with European buyers.

Cassia—Reports from dealers indicate this market is weak. From its previous level, $7.50 per pound, it has dropped to $6.50 per pound. Some grades may even be purchased for as little as $6 per pound.

Citronella—Brazil produced approximately 5 metric tons of citronella during 1959. The value of this material was $11,000.

Eucalyptus — The market continues steady with no change in spot prices.

It is reported by trade sources that Brazil produced 145 metric tons of Citriodora eucalyptus oil during 1959. The value of this material was $193,000.

Brazel produced 11 metric tons of Globulous eucalyptus (USP) in 1959 which was valued at $11,000.

Lavender—The market is said to be firm with no reports of price changes.

The 35-37 percent ester continues to range between $1.85 and $3 per pound; the 40-42 percent ester continues to range between $3.50 and $3.65 per pound and Spanish spike material continues to range between $1.75 and $2 per pound.

Lemon—Brazil reportedly produced 18 metric tons of lemon oil in 1959. The approximate value of this material was $110,000.

On spot, dealers who have material report that sales are good. Prices continue to range between $1.80 and $2.65 per pound. Dealers who have material are charging between $2.35 and $2.65 per pound.

Lemongrass—Brazil produced 7 metric tons of lemongrass oil during 1959. The approximate value of this material was $26,000.

Ocotea Cymbarum—This Brazilian sassafras oil remains stable selling for 45 and 46 cents per pound.

Orange — Brazil produced some 40 metric tons of orange oil in 1959. The value of this material was $379,000.

Palmarosa—Trade sources estimate that Brazil produced 4 metric tons of palmarosa oil in 1959. The value of this material is said to be $191,000.

Peppermint—The market is slightly weaker, according to reports from dealers in the New Yeak area.

According to world traders, Brazil produced 650 metric tons of Japanese mint oil in 1959. The approximate value of this oil was $2,830,000.

Sage—Material is said to be moving in good quantities. Prices are unchanged. Clary continues to range between $12 and $15 per pound; Dalmation continues to range between $2.85 and $4 per pound; and Spanish continues to range between $1.25 and $1.60 per pound.

Clary sage is native to the Mediterranean countries. It grows wild in the southern part of France, in North Africa, parts of Italy and on the Crimean peninsula of the Soviet Union.

The essential oil is contained in the green parts of the plant, especially the flowering tops which contain an odor that is described as winelike and something like embergris.

The oil is used extensively in perfumery. It is said to blend well with oils of lavender, bergamot and jasmine.

Sassafras—Even though it is illegal to use sassafras and safrol to flavor food products any more, dealers report they still sell quite a bit of material for use as a perfuming agent.

In 1959 Brazil produced some 662

—Continued on page 50

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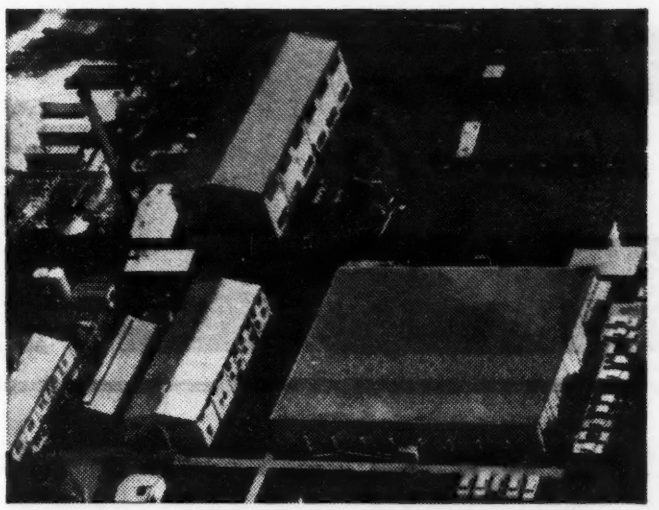

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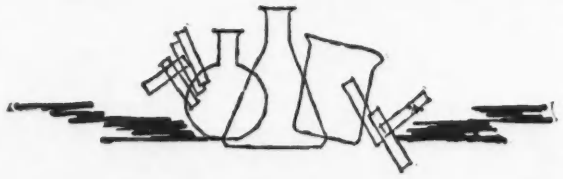

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Essential Oils

—*Continued from page 48*

metric tons of sassafras oil which was valued at $1,519,000. These figures are estimated by te US Embassy there based on data obtained from trade sources.

Tangerine—Brazil produced some 41 metric tons of tangerine oil in 1959 which was valued at approximately $266,000.

Vetiver—It is reported that Brazil produced 3.5 metric tons of vetiver oil during 1959 which was valued at $758,000.

Seeds and Spices

Ginger—After a succession of price drops, Cochin ginger has settled at the 21 cents per pound level. Material from other sources also remains at its previous quotations.

Pepper—The black peppers advanced slightly. Both Malabar and Lampong black advanced from their previous price, 45½ cents per pound, to 46½ cents per pound.

Muntok white went up from 55 cents per pound to 56 cents per pound.

Vanilla Beans—Things were quiet in the vanilla bean market last week because most producers and sellers were here in New York attending the annual convention of the Flavoring Extract Manufacturers' Association of the United States. A good deal of time was devoted to the study of the vanilla bean and its various properties.

Spot prices continue at their previous levels: Bourbon ranging between $6.95 and $7.10 per pound: Mexican cut ranging between $7.10 and $7.40 per pound; Mexican whole ranging between $7.50 and $8.50 per pound.

Linde Giant Steps

—*Continued from page 5*

is estimated to have been some $518 million.

At the formal opening of the 140-ton-a-day Huntsville plant last week, Mr. Nicholson pointed out that this facility is the first major liquid oxygen-nitrogen plant built to serve southern industry. It went into operation late last year.

"The rapid industrial growth of the south, combined with the increasing requirements of the nation's aerospace program, have boosted the demand for liquid oxygen and nitrogen in the south to a record level," he said.

The new Tonawanda facilities will also be devoted to the production of the company's own central producing mass liquid plants and to the fabrication of equipment utilized in the storage, distribution and use of liquefied gases supplied by a network of central plants.

In all, the addition of these facilities at Tonawanda will provide an increase of approximately 20 percent in the factory's productive capacity. Full utilization of the new facilities will eventually require about 150 additional personnel. Completion of the expansion and modernization work is scheduled for mid-1962.

Essential Oils, Vanilla Beans

—*Continued from page 7*

extent of 85 to 90 percent, is in adequate supply. It is taking over markets formerly governed by Chinese cassia oil, now under embargo.

Mr. Schlotterer noted that within a year vanilla prices have fallen from $14 a pound to $7, confirming his prediction of a year ago. His apprehension that political turmoil in Africa would lead to taxes and government controls has also been confirmed, it was noted.

Vanilla labeling and vanilla flavoring standards were held to be the keys to the market's current supply difficulties.

To assure a dependable source of supply, Mr. Schlotterer declared, an equivalent market must be guaranteed—and this cannot be done in the absence of standards.

While action on such standards is delayed, producing countries will protect their own interests by controlling availability of the oil, it was indicated.

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Chelating Sales for '61: Guesstimates Are in Neighborhood of $6.7 Million

Sales of chelating agents may bring as much as $7.5 million this year, according to some trade observers. Other sources are sticking to their guesstimate of a $250,000 per year increase, with a $6.2 million 1959 sales figure as a base. In other words, from this viewpoint, '61 sales will be about $6.7 million. In any case, it's considered a highly respectable showing in a specialty market which amounted to less than $1 million barely ten years ago. Production of all ethylenediamine tetraacetic acid-type sequestering agents increased from 11.1 million pounds in 1958 to 19.5 million in 1959, according to Tariff Commission figures.

SEQUESTRANTS SALES: 1954-61

1961	*20.0 million lbs.
1960	*16.2 million lbs.
1959	15.3 million lbs.
1958	7.5 million lbs.
1957	6.3 million lbs.
1956	6.2 million lbs.
1955	4.4 million lbs.
1954	3.4 million lbs.

*Estimate
Source: Tariff Commission

And sales in the '58-'59 period were really impressive, moving up from 7.5 million to 15.3 million pounds. This year it's estimated that 18-20 million pounds of sequestering agents will be sold in half a dozen major outlets.

As volume has increased and these outlets have expanded, chelates prices have continued a steady downtrend. The 38-40 percent sodium EDTA solution, widely used in the industry, currently goes for 13-15 cents a pound in large quantities. Solid forms are 43-45 cents a pound and free acid is 70 cents. These prices compare with the $1.30 a pound quoted on EDTA acid and $1 a pound for sodium acid salt ten years ago.

End-Use Breakdown For Chelates

An industry breakdown of end-uses for chelates lists the textile industry as the largest consumer. It's estimated that about 30 percent of chelates output goes into textile applications. Chemical processing takes up 16 percent; rubber, 16 percent; soap and detergents, 15 percent; agriculture, 6 percent; and metals cleaning, 5 percent. Miscellaneous applications make up a balance of about 12 percent.

In all applications, sequestrants serve to tie up metal ions in solution to keep them from reacting with other substances to form an undesirable precipitate.

In many cases the EDTA-type chelates make a place for themselves in removing impurities which cannot be removed in any other way. The textile industry uses chelates to remove traces of metals which find their way into finishing and dyeing operations and deposit on fabrics or react with dyestuffs and ruin the color. For example, chelates can remove the trace of lead on rayon that results from storing or making sulfuric acid in lead-lined tanks.

Raw rubber may normally contain significant amounts of manganese and copper ions. Chelates act to stabilize the natural latex and protect against impurities present in vulcanizing and filling ingredients.

Other smaller applications slated to grow during the sixties include agriculture use, electroplating, mineral separations and food additives. EDTA chelates have been used since 1952 in correcting iron-deficiency in Florida citrus trees.

Major producers in the field include Dow Chemical Company with "Versene," Geigy Industrial Chemicals with "Sequestrene" and "Chel" products, General Aniline & Film ("Cheelox") and Glyco Products ("Tetrine").

More Chelate Producers

Refined Products Company, Lyndhurst, N. J., manufactures "Permakleer," and American Cyanamid Company has the "Cyquest" series.

Hampshire Chemical Corporation, Nashua, N. H., manufactures and sells "Hampene" (EDTA) and "Hampshire NTA" acids and derivatives. The firm moved into the chelates picture about three years ago when it was organized specifically to research, produce and market chelating agents and chemical specialties based on chelation.

Last year Hampshire Chemical Corporation started production of nitrilotriacetic acid and salts. The compound has been known for many years in Europe as a high priced specialty chemical and was, in fact, the first synthetic amino acid type chelating agent to be produced commercially.

NTA volume has been growing during the past year on development of new applications in water treatment and in detergent and cleaner applications.

The compound is usually used in conjunction with other additives where its chelating power acts to tie up metal ions and prevent formation of scale in radiators, home boilers and cooling towers of various types.

"NTA 150" (40 percent solution) is available from Hampshire at 50½ cents a pound, and "Hampene 100" (tetrasodium EDTA, 38 percent solution) at 15½ cents a pound in truckload. The company markets a complete line of chelating agents based on NTA and EDTA acids.

The company has completed market testing on a sodium glucoheptinate product and is currently making it available to the trade. The new product is termed a high-quality, straw-colored sugar acid, especially recommended for sequestering iron at high pH where conventional chelating agents are not effective. The clear color is an improvement over currently commercial products which are of a molasses hue. Potential use areas are in bottle washing compounds, in electroplating, and in textile applications where a highly alkaline solution is used.

Hampshire Marketing Sodium Sarcosine

Hampshire Chemical is oriented to hydrogen cyanide chemistry. With this in mind, the company made another recent product addition (not a chelating agent) in sodium sarcosine, derivatives of which go into tooth pastes and dentifrice preparations and, on the industrial level, into corrosion inhibitors.

The company feels availability of this low cost intermediate will enable consumers to make their own derivatives at a substantial cost saving.

Geigy Industrial Chemicals markets "Sequestrene" and "Chel" chelating agents. Aside from the full line of standard EDTA products, the company has a number of specialt, items suitable for applications in analytical work. Among the latter are "Chel CD," "DP," "NE," and "DE."

Geigy's "Sequestrene Solution" is the standard sodium EDTA with acid equivalent of 30-32 percent. The product is a starting point for a variety of other sequestering and chelating agents which the company manufactures.

Geigy got into chelates when it bought Alrose Chemical in 1949, but since 1958 has been producing chelates at McIntosh, Ala., where Geigy also turns out DDT and other agricultural chemicals.

American Cyanamid Company has continued to round out its chelate line. Until last fall the company offered only "Cyquest 40," a 38-40 percent aqueous solution of tetrasodium EDTA.

However, since then Cyanamid has added "Cyquest 40D," a solid form of tetrasodium EDTA, and "Cyquest Acid," the free acid. Two other specialty iron se-

—Continued on page 60

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AMMONIUM CARBONATE—75 dms, Philipp Bros Chemicals, Rotterdam
ANILINE DYES—4 dms, General Aniline & Film Corp, Bremen
157 dms, H Bruckmann & Lorbacher, Bremen
16 dms, Arondy Corp, Liverpool
102 dms, Geigy Chemical Corp, Bremerhaven
32 dms, Geigy Chemical Corp, Havre
30 dms, Heemsoth Kerner, Liverpool
28 dms, Sandoz inc, Havre
112 dms, Rotterdam
33 dms, Havre
ANISE SEED—50 bgs, E A Johnson & Son, Vera Cruz
ANNATTO SEED—128 bgs, Marcel Calvet, Vizagapatnam
BEESWAX—21 bgs, H Marmorek & Son, Alicante
25 bgs, Machado & Co, Ciudad Trujillo
198 bgs, Koster Keunen, Djibouti
51 bgs, Lenape Trading Co, Port Au Prince
120 bgs, Kane import Corp, Talcahuano
23 bgs, Port Au Prince
160 blks, Lisbon
12 bls, Progreso
BERGAMOT OIL—150 cs, Messina
BISMUTH—20 bgs, J E De Sousa, Nacala
BOIS DE ROSE OIL—5 dms, Fritzsche Bros, Callao
BUTTONLAC—50 bgs, Calcutta
CADMIUM—200 cs, Overseas Metal & Ore Corp, Lobito
CALCIUM CARBONATE—1,800 bgs, Whittaker Clark & Daniels, Liverpool
1,200 bgs, N H Weitzner, Antwerp
1,100 bgs, Antwerp
CALCIUM CARBONATE, PRECIPITATED—1,100 bgs, H J Baker & Bro, Liverpool
CAMPHOR—40 cs, H A Gogarty, Hong Kong
300 dms, Hamburg
CANDELILLA WAX—313 bgs, Tampico
CARAWAY SEED—200 bgs, C M Van Sillevoldt, Rotterdam
150 bgs, Levy & Levis Co, Rotterdam
200 bgs, Hoger Corp, Rotterdam
600 bgs, Rotterdam
CARBAZOL—40 cks, F L Kraemer, Rotterdam
CARBON, DECOLORIZING—111 bgs, L A Salomon & Bro, Rotterdam
CARBON TERTACHLORIDE—100 tons, Bell Chemical Co, Genoa
CARDAMOMS—10 cs, Wm E Martin & Sons, Mangalore
20 cs, Wm E Martin & Sons, Puerto Barrios
CARNAUBA WAX—357 bgs, Cornelius Wax Refining Corp, Natal
23 bgs, M Argueso & Co, Natal
77 bgs, Wm Diehl & Co, Fortaleza
279 bgs, M Argueso & Co, Fortaleza
279 bgs, Cornelius Wax Refining Corp, Fortaleza
637 bgs, Frank B Ross, Fortaleza
224 bgs, Balfour Guthrie, Fortaleza
200 bgs, J W Hanson Co, Fortaleza
168 bgs, Irving Trust Co, Fortaleza
188 bgs, Irving Trust Co, Tutoia
63 bgs, Bankers Trust Co, Tutoia
376 bgs, Marine Midland Trust Co, Tutoia
63 bgs, National City Bank, Tutoia
404 bgs, Bank of N Y, Tutoia
375 bgs, Balfour Guthrie, Tutoia
188 bgs, Bank of London & S A, Tutoia
213 bgs, Chase Manhattan Bank, Tutoia
200 bgs, Latina Trading Corp, Salvador
149 bgs, Fortaleza
301 bgs, Tutoia
CASEIN—200 bgs, Chase Manhattan Bank, Buenos Aires
300 bgs, Stone & Downer, Buenos Aires
1,000 bgs, W L Willner Co, Buenos Aires
480 bgs, J R Spellacy, Melbourne
4,398 bgs, A J Mills & Co, Auckland
CASHEWNUT SHELL LIQUID—93 tons, Minnesota Mining & Manufacturing Co, Mangalore
CASSIA—180 bls, Ludwig Mueller, Rotterdam
1,938 bls, Rotterdam
CASTOR OIL—453 tons, Baker Castor Oil Co, Lobito
CETYL ALCOHOL—112 bgs, Orbis Products Corp, Liverpool
CHESTNUT EXTRACT—2,000 bgs, Barkey Importing Co, Naples
CHICORY ROOT—200 bgs, E O Schaeffer Chemical Co, Hamburg
CINNAMON BARK—192 bgs, L A Champon & Co, Mombasa
CINNAMON QUILLS—35 bls, Curacao Trading Co, Colombo
110 bls, Max Van Pels, Colombo
CITRONELLA OIL—17 dms, George Uhe Co, Galle
14 dms, Magnus Mabee & Reynard, Galle
CLOVE OIL—15 dms, Zanzibar
COCONUT OIL—70 tons, Fallek Products Co, Rotterdam
720 tons, American Trust Co, Cebu
CODLIVER OIL—24 tons, J H Faunce, Reykjavik
COPAL GUM—187 bgs, O G Innes Corp, Manila
78 bgs, S Winterbourne & Co, Singapore
COPPER CYANIDE—110 dms, D Hauser, Hamburg
COPPER OXYCHLORIDE—100 bgs, Riches Nelson, Antwerp
CORIANDER SEED—149 bgs, Kenitra
CORN STARCH—1,670 bgs, Rotterdam
DAMMAR GUM—100 cs, S Winterbourne & Co, Bangkok
193 bgs, S Winterbourne & Co, Singapore
15 bgs, Morningstar Paisley Inc, Singapore
35 bgs, O G Innes Corp, Singapore
DEGRAS—18 dms, Olympic Shipping Co, Liverpool
52 dms, H A Gogarty, Yokohama
53 dms, H A Gogarty, Kobe
27 dms, N I Malmstrom, Rotterdam
2 dms, H J Meeter Co, Rotterdam
DEXTRIN—330 bgs, Morningstar Paisley Inc, Rotterdam
430 bgs, Manufacturers Trust Co, Rotterdam
75 bgs, S S Stafford Inc, Rotterdam
224 bgs, Rotterdam
DILL SEED—297 bgs, M J Golombeck, Bombay
78 bgs, Louis Furth, Bombay
160 bgs, Meer Corp, Bombay
DIMETHYLUREA—68 dms, Philipp Bros, Chemicals, Bremen
GELATIN—75 dms, B Young, London
303 bgs, H Bruckmann & Lorbacher, Rotterdam
40 dms, H Bruckmann & Lorbacher, Rotterdam
100 bgs, H Bruckmann & Lorbacher, Copenhagen
200 bgs, T M Duche & Sons, Gothenburg
30 bbls, Riches Nelson, Antwerp
300 bgs, B Young, Antwerp
GELATIN—200 bgs, T M Duche & Sons, Antwerp
200 bgs, T M Duche & Sons, Antwerp
30 bbls, Coignet Chemical Co, Antwerp
224 bgs, Antwerp
29 bbls, Antwerp
100 cks, Havre
40 bgs, Marseille
GHATTI GUM—110 bgs, Morningstar Paisley Inc, Bombay
GINGER—320 bgs, California Commodities Corp, Alleppey
80 bgs, A A Sayia, Alleppey
160 bgs, East India Trading Co, Alleppey
480 bgs, East India Trading Co, Cochin
80 bgs, Kellys America Ltd, Cochin
240 bgs, K H Landes & Co, Cochin
160 bgs, M J Golombeck
87 bgs, Van Loan & Co, Kingston
112 bgs, Meer Corp, Kingston
640 bgs, Cochin
780 bgs, Freetown
GUAR GUM—200 bgs, T M Duche & Sons, Rotterdam
GYPSUM—180 dms, C B Chrystal Co, Liverpool
GYPSUM, CRUDE—30,821 tons, U S Gypsum Co, Hantsport
HEPTANOIC ACID—347 dms, International Selling Corp, Marseille
HEXACHLOROETHANE—420 bgs, International Selling Corp, Marseille
HYDRAZINE HYDRATE—100 dms, E F Drew & Co, Bremen
IRON BLUE—46 dms, Van Oppen & Co, Liverpool
IRON OXIDE—20 bgs, Aceto Chemical Co, Barcelona
224 bgs, Whittake Clark & Daniels, Liverpool
400 bgs, C B Chrystal Co, Malaga
441 bgs, Malaga
KAMALA POWDER—34 bgs, S B Penick & Co, Bombay
34 bgs, Prentiss Drug & Chemical Co, Bombay
KARAYA GUM—319 bgs, Block Drug Co, Bombay
38 bgs, Meer Corp, Bombay
63 bgs, Colony Import & Export Corp, Bombay
LACTIC ACID—50 dms, A Millner Co, Liverpool
LAVANDIN OIL—3 kgs, Fleuroma Inc, Cannes
71 kgs, Tombarel Products Co, Cannes
3 cks, Brown Bros, Cannes
LEMON OIL—9 dms, Fritzsche Bros, Vera Cruz
13 dms, Ungerer & Co, Vera Cruz
140 cs, Messina
LEMON PEEL—19 bls, F D Keller & Son, Alicante
LEMONGRASS OIL—13 dms, Volkart Bros, Cochin
25 dms, International Flavors & Fragrances Inc, Cochin
12 dms, Maywood Chemical Works, Cochin
2 dms, Lo Curto & Funk, Puerto Barrios
LITHARGE—368 dms, Eagle Picher Co, Tamoico
LITHOPONE—300 bgs C J Osborn Co, Rotterdam
LOCUST BEAN GUM—100 bgs, Wm M Allison & Co, Portimao
560 bgs, P A Dunkel, Portimao
700 bgs, T M Duche & Sons, Portimao
200 bgs, J L Guesada, Lisbon
20 bgs, Valencia
LOGWOOD EXTRACT—200 dms, American Dyewood Co, Kingston
MAGNESITE—1,000 bgs, Cochin
MANDARIN OIL—20 cs, Messina
MARJORAM LEAVES—22 bls, Van Loan & Co, Marseille
MENTHOL—100 cs, American Far Eastern Syndicate, Santos
50 cs, National City Bank, Santos
250 cs, Lo Curto & Funk, Santos
100 cs, Fritzsche Bros, Santos
25 dms, Marseille
MOLASSES—462 tons, Pacific Molasses Co, Salaverry
MONOCHLOROACETIC ACID—80 dms, Bremen
MYROBALANS—3,720 bgs, Hammond & Carpenter, Vizagapatnam
2,440 bgs, First National Chicago, Vizagapatnam
6,185 bgs, Barkey Importing Co, Vizagapatnam
NAPHTHALENE—2,500 bgs, Reichhold Chemicals Inc, Rotterdam
1,913 bgs, Hudson Shipping Co, Rotterdam
700 bgs, Ore & Ferro Corp, Rotterdam
634 bgs, Hudson Shipping Co, Hamburg
2,250 bgs, Rotterdam
1,123 bgs, Antwerp
358 bgs, Hamburg
NUTMEG—70 bgs, K H Landes & Co, Singapore
70 bgs, M J Golombeck, Singapore
608 bgs, Dodge & Olcott, Singapore
70 bgs, M J Golombeck, Singapore
36 bgs, Hismoco American Co, Singapore
42 bgs, J H Elton, Singapore
OLIVE OIL—50 dms, Uddo & Taormina, Palermo
10 dms, C Orlando, Palermo
48 dms, Chase Manhattan Bank, Seville
30 dms, Bank of California, Seville
56 dms, Sahadi Importing Co, Seville
283 dms, Swiss Credit Bank, Malaga
50 dms, Hanover Bank, Malaga
72 dms, National City Bank, Malaga
350 dms, Uddo & Taormina, Malaga
25 dms, Solar Food Products, Malaga
120 dms, J Ossola Co, Malaga
61 dms, Bankers Trust Co, Seville
225 dms, National City Bank, Seville
50 dms, Hanover Bank, Seville
121 dms, Manufacturers Trust Co, Seville
487 dms, National City Bank, Pasajes
275 dms, Gem Packing Corp, Pasajes
48 dms, Morgan Guaranty Trust Co, Pasajes
200 dms, J H Schroder, Sfax
60 dms, Toronto Bank, Sfax
25 dms, Marseille
OREGANO—221 bgs, H Marmorek & Son, Tampico
PALM OIL—300 tons, Belawan Deli
325 tons, Matadi
PALMKERNEL OIL—1,250 cs, B M T Commodity Corp, Rotterdam
748 tons, Matadi
PAPRIKA—200 bgs, A G Beckman, Alicante
50 bgs, Theobald Sales, Alicante
200 bgs, J Weinstein, Alicante
100 bgs, J Rossi, Alicante
900 bgs, A A Savia, Alicante
100 bgs, Gel Spice Co, Hamburg
PEPPER, BLACK—160 bgs, Mutual Spice Co, Cochin
80 bgs, A A Savia, Cochin
320 bgs, East India Trading Co, Cochin
160 bgs, Delano Corp of America, Cochin
160 bgs, C M Van Sillevoldt, Alleppey
400 bgs, Ludwig Mueller, Alleppey
40 bgs, A A Savia, Alleppey
40 bgs, J H Elton, Singapore
420 bgs, Otto Gerdau, Singapore
PEPPER, BLACK—70 bgs, Kellys America Ltd, Singapore
280 bgs, C Czarinkow, Singapore
80 bgs, A G Dunn, Cochin
210 bgs, A G Dunn, Singapore
980 bgs, Singapore
1,440 bgs, Alleppey
PEPPER, RED—100 bgs, Kellys America Ltd, Yokohama
66 bgs, Hollander Trading Co, Lagos
PEPPER, WHITE—200 bgs, Incotraco Inc, Belem-Para
200 bgs, M J Golombeck, Belem-Para
100 bgs, Mitsui & Co, Belem-Para
70 bgs, C Czarinkow, Singapore
70 bgs, Singapore
PERCHLOROETHYLENE—392 tons, International Selling Corp, Marseille
PETITGRAIN OIL—12 dms, Lo Curto & Funk, Asuncion
7 dms, E Buschoff & Co, Asuncion
24 dms, Asuncion
POLYVINYL ACETATE—200 dms, Rotterdam
POLYVINYL ACETATE EMULSION — 25 dms, Lloyd Associates, Bremen
POPPYSEED—250 bgs, Levy & Levis Co, Rotterdam
200 bgs, Sokol & Co, Rotterdam
300 bgs, Louis Furth, Rotterdam
200 bgs, Rotterdam
POTASH, CAUSTIC—108 dms, B T Chemco Inc, Gotherburg
POTASH, MURIATE—1,820 tons, Potash Import & Chemical Co, Bremen
POTASSIUM CYANIDE—200 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM FERRICYANIDE—300 cs, Consolidated Distributors, Antwerp
POTASSIUM NITRATE—200 bgs, Bremen
PYRETHRUM EXTRACT—36 dms, Mombasa
PYRETHRUM FLOWERS—220 bls, P H Petry, Puna
PYRITES—212 cks, American Metal Climax, Leixoes
QUEBRACHO EXTRACT—11,127 bgs, American Tanners Ltd, Buenos Aires
191 bgs, Tac Tannins & Chemicals Inc, Buenos Aires
1,197 bgs, Tanimex Corp, Buenos Aires
RAUWOLFIA SERPENTINA ROOT—46 bgs, Meer Corp, Bombay
RUTILE SAND—4,000 bgs, Metal Traders Inc, Brisbane
SAGO FLOUR—257 bgs, Singapore
SANDALWOOD—112 bgs, National City Bank, Cochin
100 bgs, National City Bank, Bombay
SANDALWOOD OIL—3 cs, Ungerer & Co, Bombay
14 cs, Lo Curto & Funk, Cochin
17 cs, Norda Essential Oil & Chemical Co, Cochin
2 cs, Fritzsche Bros, Bombay
5 cs, National City Bank, Bombay
9 cs, George Luecders & Co, Cochin
2 cs, Coutin Associates, Marseille
10 cs, Cochin
SEEDLAC—200 bgs, Wm Zinsser & Co, Calcutta
500 bgs, Bradshaw Praeger & Co, Calcutta
700 bgs, Calcutta
SENNA LEAVES—300 bls, Meer Corp, Tuticorin
SESAME SEED—560 bgs, A Sahadi & Co, Puerto Barrios
SOAP BARK—250 bls, S B Penick & Co, Talcahuano
SODIUM BICARBONATE—800 bgs, Chemical Manufacturing Co, Liverpool
SODIUM BOROHYDRIDE—40 dms, Metal Hydrides Inc, Bremen
SODIUM CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
SODIUM LAURYL SULFATE—131 cks, Liverpool
SODIUM NITRATE—5,900 tons, Morgan Guaranty Trust Co, Tocopilla
SODIUM PERBORATE TETRAHYDRATE—1,099 bgs, Chemical Manufacturing Co, Liverpool
SODIUM TETRAPHENYLBORON—1 cs, Fischer Scientific Co, Hamburg
SULFAMIC ACID—477 bgs, H Bruckmann & Lorbacher, Bordeaux
TALC—1,682 bgs, Whittaker Clark & Daniels, Bordeaux
1,100 bgs, C B Chrystal Co, Bordeaux
4,190 bgs, Charles Mathieu, Genoa
TAMARINDS—80 bgs, Murbas Trading Co, Madras
105 bbls, Port Au Prince
25 bgs, S B Penick & Co, Tuticorin
120 bdls, Wm M Allison & Co, Tuticorin
50 bbls, S B Penick & Co, St Johns
TAPIOCA FLOUR—2,783 bgs, Tapioca Associates, Kohsichang
2,056 bgs, Geismar & Co, Kohsichang
150 bgs, Poons Co, Kohsichang
3,336 bgs, Stein Hall & Co, Kohsichang
2,434 bgs, Zilkha & Sons, Lome
TARTARIC ACID—2,700 bgs, Leonhardt & Brush, Barcelona
THYME LEAVES—200 bgs, M J Golombeck, Marseille
TURMERIC—160 bgs, L E Ransom, Cochin
160 bgs, M J Golombeck, Cochin
160 bgs, Mincing Trading Corp, Cochin
480 bgs, A G Dunn, Cochin
80 bgs, Kellys America Ltd, Alleppey
80 bgs, Wm M Allison & Co, Alleppey
80 bgs, S B Penick & Co, Alleppey
160 bgs, A A Savia, Alleppey
56 bgs, Kellys America Ltd, Kingston
153 bgs, M J Golombeck, Port Au Prince
720 bgs, East India Trading Co, Alleppey
VANILLA BEANS—77 cs, Marseille
WATTLE EXTRACT—1,617 bgs, Elkan River Plate Corp, Mombasa
538 bgs, Elkan River Plate Corp, Durban
ZINC OXIDE—1,440 bgs, Hercules Powder Co, Vera Cruz
ZIRCON SAND—3,572 bgs, Lo Curto & Funk, Brisbane

FDA's Horizon: Congress Asks Details

—*Continued from page 5*

000, an increase of $4,732,000 over the amount appropriated for the current year.

The house appropriations committee reported, and the house later approved, this amount for the agency last week. The sum was included in the appropriation bill for the HEW department totaling $4,020,134,000, up $150,134,000 from this year.

FDA actually had programmed an increase of $9,827,000 for 1962, which would have permitted the addition of 772 positions to its enforcement staff.

This was cut back to an increase of $5,278,000 before the appropriation got out of the department, however, and reduced again by the Budget Bureau to the $4,732,000 increase approved by the house last week.

The increase will permit the expansion of the enforcement staff by 301 positions, which includes ninety-five new positions in the pesticide control work, forty-two in the food additives field and the remaining 164 in other regular programs with emphasis on drugs.

In testimony on the appropriations made public last week, Commissioner Larrick emphasized the aims of FDA to lighten up its pesticide enforcement work. Over $700,000 is to be added to this program, he said, because this is an area where more work needs to be done.

He said that there are 2.5 million shipments of fresh fruits and vegetables every year and more than 3,000 formulations of poisons are used on these crops.

Wants to Do a Job

"I would like to get out and do a job that would be preventive and localize the problem," Mr. Larrick said, "and not lead to another major publicity problem involving the fresh fruit and vegetable supply."

As has been the case in recent years, the biggest portion of the department's overall increase went to the National Institutes of Health.

The appropriations committee added $58 million to the budget for these agencies making a total for 1962 of $641 million, or $81 million more than this year.

The committee said it was unable to discover the reason for the $58 million cut made by the Budget Bureau.

Concern was expressed by the committee over the problem of NIH in recruiting and retaining scientists of the highest caliber. It noted offers received by senior scientists in NIH have ranged as high as $50,000 and offers in the $20,000 to $30,000 range are common.

The top salary which the institutes can offer, in limited numbers, is $19,000, and the committee expressed the hope that suitable recommendations would soon be made to alleviate this situation.

Appropriations in the new budget for the various functions of NIH are broken down in this fashion:

General research and services—$119,275,000, an increase of $23,934,000 over the budget and $35,375,000 over the current year.

National Cancer Institute—$125,672,000, an increase of $8,505,000 above the budget and $14,672,000 over this year.

Mental health activities—$92,182,000, an increase of $8,505,000 above the budget but $8,718,000 less than this year.

National Heart Institute—$105,723,000, an increase of $8,650,000 over the budget and $18,823,000 over this year.

Dental research activities—$14,681,000 an increase of $748,000 over the budget but $819,000 less than this year.

Arthritis and metabolic disease activities—$73,661,000, an increase of $4,921,000 over the budget and $12,461,000 over this year.

Allergy and infectious disease activities—$52,182,000 an increase of $3,860,000 over the budget and $8,182,000 over this year.

Neurology and blindness activities—$57,624,000, an increase of $3,524,000 over the budget, and $1,024,000 over this year.

ICA Funds to Vietnam For Fertilizer Purchases

Procurement authorizations totaling $1.6 million were issued to Vietnam last week by International Cooperation Administration to purchase fertilizer materials from world-wide sources.

The authorizations included $700,000 for nitrogenous fertilizers (PA No. 1007); $230,000 for potash fertilizers (PA No. 1008); and $720,000 for phosphates and phosphatic fertilizer materials (PA No. 1009).

Bids Wanted

Ammonium Chloride, 70 tons, bids are invited until May 31 by the government of the Union of Burma, Industrial Development Corporation, Steel Mill, Insein, Ywama. **Pitch,** dehydrated, 10 metric tons, bids are invited by the government of The Union of Burma, address as above. Copies of bidding instructions, specifications and other data are available on loan from the Trade Development Division, Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D.C.

Glue, 148 tons, bids are invited until June 10, by the Iranian Tobacco Monopoly, Teheran. Copies of bidding instructions may be obtained from the Trade Development Commission. For address see above.

Insecticides, Aldrin, bids are invited until June 3 by the Central Foreign Purchasing Board, Ministry of Agriculture, Baghdad. Prospective bidders must make a provisional deposit of 7 percent for the first thousand dinars and five percent for the rest of the total price offered. Copies of bidding instructions may be obtained from the Trade Development Commission, US Department Of Commerce. **Malathion,** 0.0 dimethyl dithiophosphate of diethyl mercaptosuccinate, 90 percent tech., 10.25 pounds per gallon, purity grade of 95 percent, packed in lined 55 gallon drums, 1,430 gallons. **Thanite,** 495 gallons, 82 percent isobenzyl thirey-aneacetate, 18 percent other active terpens. Specific gravity 1.102 at 15.6 degrees C. 9.18 pounds per gallon. Base Procurement Office, Mac Dill Air Force Base, Fla.

Coating Materials

Coating formulators and suppliers cranked out price announcements last week in an effort to pace the rapidly changing raw materials market. Higher listings on copper, cadmium; lower prices on zinc, resulted in similar changes on their related pigments. Follow up announcements on the oxo alcohol derived phthalate esters realigned ester listings to lower levels. Copper oxide was boosted 1 cent a pound on black, and USN type I and II.

Copper metal is reported to be under strong demand from many industrial quarters. This marks the second time copper oxide prices have been boosted in the last few weeks.

Cadmium pigments, up 3 cents to 7 cents a pound, were also raised in reaction to higher prices for cadmium metal. Demand for the pigments is reported to be marginally improved by consumers stockpiling of the pre-price increae material but is expected to return to an average rate of business in the coming week.

Casein continues to show a bullish stance for the week. Prices were generally up about ¼ cent on Argentine, Polish and Australian caseins. Demand overseas, particularly in Europe and Japan is reported to be especially strong. Closing price last week set new highs for the casein on imported casein.

Demand for the phthalate esters is reported to be currently at good levels, with supplies said to be improving. A reversal in the supply situation of the esters is felt by some in the trade to be a distinct possibility. Others contend that while the phthalate ester supplies are improving, it does not indicate that any easing in the market for the forseeable future.

Price Trends

Advanced

Cadmium pigments, 3c. to 7c. per lb.
Copper oxide, 1c. per lb.

Reduced

Zinc oxide, USP, ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 20, 1960
104.69	104.58	104.55	103.14

For Current Prices See Page 9

Prime Pigments

Antimony Oxide — Market continues strong in all respects. Fireproofing uses are particularly active, as has been the case over the past year. Listings are still split. Majority of business is being done on the basis of 30c. a pound for car lot quantities. One producer however, continues to report his price as 3½c. below the level current in the market.

Cadmium Pigments—Boosts of 3c. to 7c. a pound went into effect last week on the concentrated cadmium pigments and the lithopones. Pre-price boosted material was in demand as consumers sought in build inventories, but sources report market return to normal levels in the next few weeks.

The new cadmium listings are as follows: Cadmium lithophone yellows $1.27 a pound with the concentrated shades at $3.02 a pound. Cadmium oranges $1.73 a pound; red light shades, $1.80 a pound; red medium light shades, $1.88 a pound; red medium shades, $1.95 a pound; red dark shades, $2.03 a pound; maroon shades, $2.11 a pound.

Concentrated type orange are newly quoted at $4.12 a pound; red light shade concentrated types $4.32 a pound; red medium light, $4.47 a pound, red medium, $4.62 a pound; red dark shade, $4.82; maroon concentrated shade, $5.02 a pound.

Cadmium selenide pigments are also boosted 3c. a pound. This sets light cadmium orange at $1.66 a pound; deep cadmium orange at $1.80 a pound; light cadmium red at $1.96 a pound; medium light cadmium red at $2.08 a pound; medium red at $2.31 a pound; dark cadmium red at $2.64 a pound; and cadmium maroon at $2.84 a pound.

Basis for the cadmium pigment price increase was the 10c. a pound boost on listings for the metal.

Chrome Colors—Census reports that the output of chrome yellow and orange reached 2,184 short tons in March, compared to 1,654 short tons in February. For March, 1960, production of yellow and orange was reported at 2,217 short tons. Stocks of yellow and orange maintained by producers were slightly reduced in March. Stocks on hand were reported at 2,390 short tons, compared to 2,552 short tons at the end of March last year.

Molybdate chrome orange production in March was higher than in previous months. Output at 596 short tons in March topped both February and March of last year. Production in February was 519 short tons, while March 1960 output was reported at 566 short tons.

Stocks of molybdate held at producers plants were also increased slightly. Stocks on hand went from 610 short tons at the end of February to 653 short tons at the end of March, the Census Bureau reports.

Lead Pigments—Shipments of red lead and orange were slightly ahead of production in March, Census Bureau reports. Production lagged behind shipments by some 97 short tons as movement of red lead and orange totaled 2,024 short tons.

Litharge shipments in March were reported at 10,695 short tons, again edging output by some 600 short tons. Dry white lead shipments in March hit 1,000 short tons or about the same as production in that month. The three month production-shipment ratio was reported at 825 tons shipped and 826 tons produced.

Titanium Dioxide—Improvement in titanium dioxide for paint use seems to be part of the pattern that is currently taking hold in the paint materials market. Supplies and listings are unchanged in situation, sources note.

Census Bureau reports that production in March hit 41,289 short tons. While this was way above the level reported for February (34,455 short tons) it barely nosed out the output for March of last year. Stocks of titanium dioxide held at producers plants were from 68,818 short tons at the end of February to 67,905 short tons at the end of March.

Zinc Oxide—USP grade of zinc oxide was reduced ¼c. a pound, effective May 15. USP zinc oxide escaped the reductions posted at the beginning of the year that hit other zinc oxide grades. In the last few months the situation existing in the lead-zinc market has not changed. The problem of over-supply, although partially checked by cut-backs in production, still has not completely solved the problem.

At the recent lead-zinc association meeting the emphasis was placed on finding new uses for these basic metals. It is on that plan of action, the lead-zinc trade to regain their hold on the market.

Lacquer Materials

Nitrocellulose — Demand for nitrocellulose is reported to be keeping pace with the pickup in nation's economy. Demand from furniture coatings formulators is reported to be a good levels.

On June 1, listings for nitrocellulose will be boosted 1c. a pound, the first price increase on nitrocellulose in three years.

Plasticizers—Other producers are reported to have adopted the lower listings on the oxo alcohol phthalates. Alcohols were reduced 4c. a pound in many cases, and resulted in similar cuts in the esters that require the alcohols in their production.

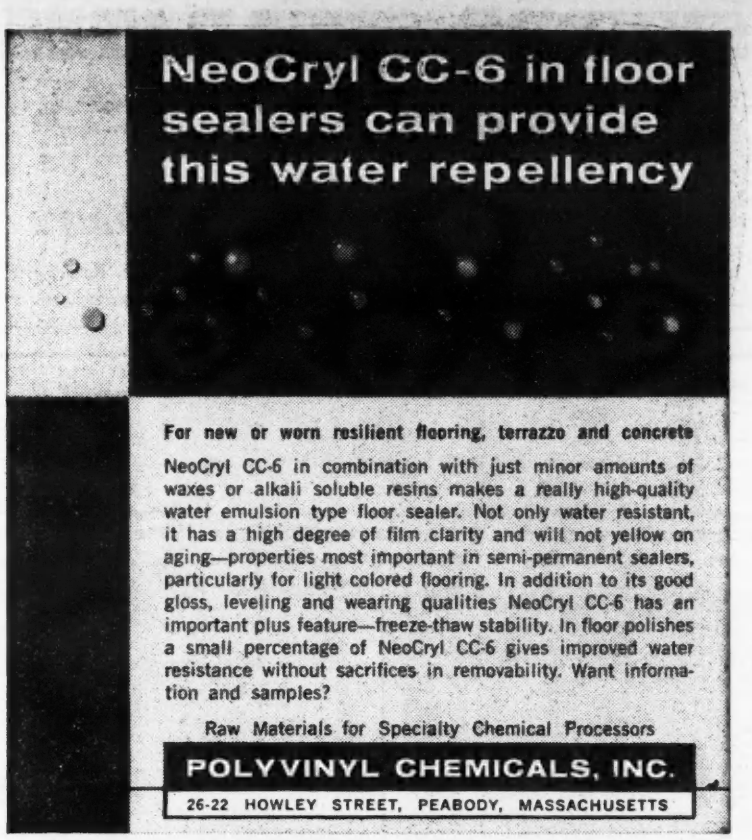
While the present market for the phthalate esters finds most industrial sources calling for the plasticizers in good quantities, there is considerable difference of opinion about probable market conditions in the next quarter.

Some feel that a weakening in the ester market is very likely as supplies naphthalene, phthalic anhydride and the esters become more available. Others in the trade do not see any real change in the supply condition of naphthalene during the remainder of the year.

Miscellaneous

Casein—Strength in the casein market remains the keynote for the week. Prices were up; demand continued strong, particularly in Europe and Japan. Argentine casein listings were up about ¼c. a pound, while Polish for June-July shipment also gained a corresponding amount.

Pine Gum—US Department of Agriculture reports that sales of gum rosin totaled 6,042 drum equivalents for the week ending May 12. The average price paid producers for commercial pine gum was reported at $35.20 per barrel for the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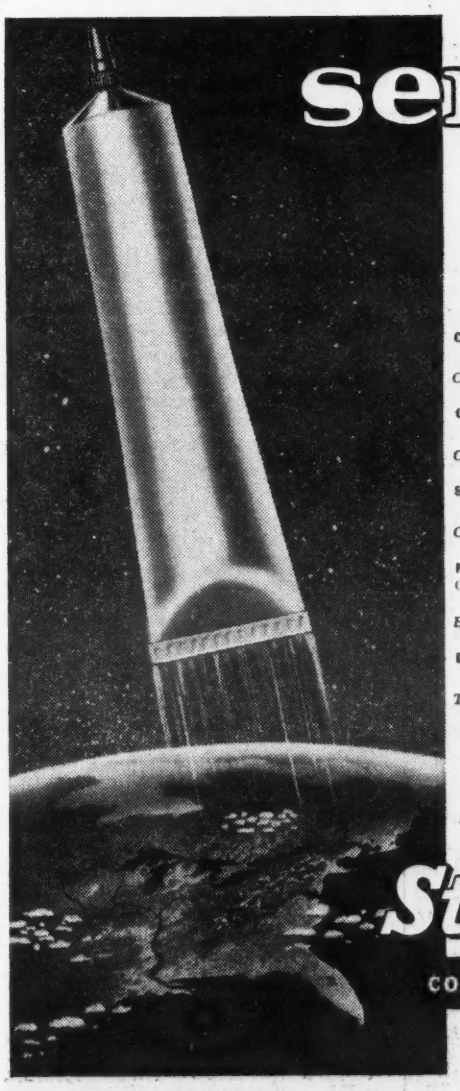

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Coating Materials

week ending May 7. Turpentine sales for the week hit 77,250 gallons and were quoted in the range of 39½c. a gallon to 41c. a gallon, tankcars, f.o.b. plants.

Coating Materials Briefs

DISPOSABLE PLATES MARKETED: Guild Plastics, Inc., Cambridge, Mass., has come up with a possible answer to the automatic dishwashing machine—disposable plastic plates. The insulated plate can be used to serve both hot and wet foods, is said to be non-absorbent and leakproof and is designed for outdoor and everyday informal use, the company reports. Twelve plates, in a printed polyethylene bag, are expected to retail for 49 cents.

POLYPROPYLENE OFFERED: Enjay Company, New York, is offering two new grades of its "Escon" polypropylene. The new grades are reported to have high flow characteristics, permitting maximum cycle retention by the faster filling of even the most complex molds. Price of natural color "Escon" grades 107 and 117 is 42c. a pound in 20,000-pound lots.

Stereo Rubber Capacity

—*Continued from page 3*

to the following developments in four general areas:

- A continued growth can be expected for synthetic rubber, since climbing world demand cannot possibly be met by natural rubber.
- Foreign competitors are determined to close the gap on the US, which has held undisputed leadership in synthetic rubbers for twenty years.
- The new stereo rubbers will force natural rubber into a battle of economics that will command a closer scrutiny of rubber raw material and process costs, both in the US and abroad.
- The American synthetic rubber industry faces two challenges—in technology and marketing. It must (along with its pertoleum and chemical partners) sharpen technological skills and revive its marketing abilities.

Aerosols at High Speed

—*Continued from page 4*

extensive and potentially undesirable overlabeling."

Dr. Klarmann, chairman of the association's precautionary labeling committee, said such regulations could ultimately generate an indifference to cautionary labeling information by diluting the meaning of toxicity to include "as much as 75 percent of all household products."

Frank A. Bower, chemist from E. I. duPont de Nemours & Co., reported nitromethane to be the most effective of about 300 compounds tested for stabilizing alchohol-based aerosol products against metal container corrosion.

On the basis of work at its "Freon" laboratory, duPont has incorporated nitromethane in a new propellent, "Freon-11," it was noted.

Robert D. Sharp, of Prentiss Drug & Chemical Company, described "a new, safer household and industrial phosphate insecticide." The compound, butonate, has been developed and patented by Wisconsin Alumni Research Foundation and licensed to Prentiss for manufacture and sale.

Advantages claimed for butonate are low mammalian toxicity, solubility in most organic solvents, compatibility with pyrethrum, and efficacy against houseflies and roaches in oil solutions, emulsions and powders.

Butonate incorporates most of the desirable qualities of organophosphate insecticides and eliminates many of their undesirable characteristics, Mr. Sharp said.

Stauffer: Bright Outlook

—*Continued from page 5*

years, and 1961 demand may exceed the prior year's by 10 percent.

However, the industry's growth during the coming year will not be accomplished without difficulties, says Mr. Stauffer. Here, he says, are some of the things the chemical people will be up against:

- While labor costs are a relatively small portion of finished chemical costs, labor constiutes a major part of new plant construction costs. And plant construction costs are a substantial element of chemical product costs.
- Foreign imports and intense domestic competition serve to hold down price increases.
- To maintain a competitive position requires greater and greater research expenditures each year.
- Government regulation (especially Food & Drug) burdens the industry and slows down innovation.
- Concern over effluent discharge to streams and to the air requires engineering time and dollar expenditures.
- There is some current overcapacity.

Gulf Oil

—*Continued from page 3*

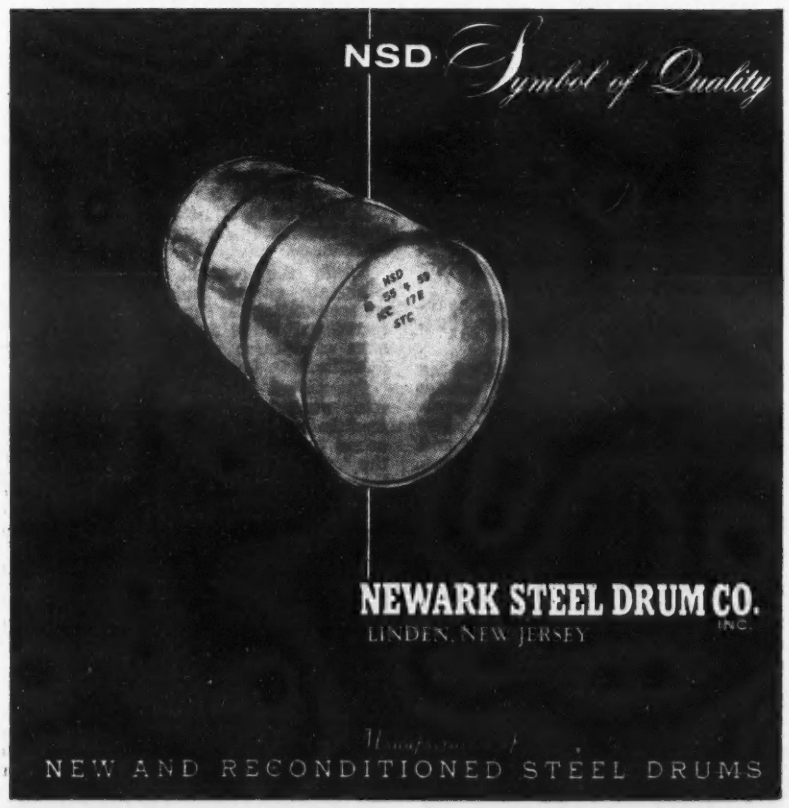
process yields phenol and acetone, could go into these R&H products: phenol-formaldehyde resins, nonylphenol and octylphenol.

Rohm & Haas, which like other chemical producers has been trying to cope with the cost-price squeeze, has long been seeking an advantageous raw materials cost position. A tie-in with Gulf might be the answer.

Besides R&H, Gulf has a captive use for phenol in refining. Then there's the foreign market. European interest has been quite heavy of late in cumene and acetone.

British American Oil Company, Ltd. (a Canadian affiliate owned 60 percent by Gulf) went on stream with the world's first high-purity cumene plant in 1953.

British American, in turn, has an interest in B-A Shawinigan, Ltd., of Montreal, a producer of phenol and acetone.



Oils, Fats and Waxes

There was little improvement in consumer demand for oils and fats last week. Business was restricted to prompt needs. Withdrawals against contracts, however, continued active. Soybean oil moved irregularly with soybean futures closing fractionally lower. Crude cottonseed oil was in limited supply and slightly lower. Corn oil declined ¼ cent while peanut oil remained scarce and firm. Crude coconut oil was steadier and shipments were slightly higher. Demand for olive oil replacements from primary sources slackened, but the Spanish and Tunisian markets continued on a firm basis.

Buying interest in tallow and greases was slow. Light trading took place at unchanged quotations for domestic needs, while export business was slow. Cash lard was steady and unchanged.

Spotty demand continued for industrial oils. While new business was slow, deliveries against former orders moved in good volume. Tung oil was inactive and more or less nominal. Linseed oil was in active request against current contracts. Brazilian castor oil quiet and shadable on firm bids. Oiticica oil was quiet but steady. Tall oil fatty acids were advanced at least 1 cent per pound by most producers. Others were expected to raise prices next month.

Slow demand for soybean meal weakened the market and prices dropped $3 per ton. Linseed meal was also easier, off $1 per ton. Cottonseed and peanut meal were in small supply and commanded premiums.

Price Trends

Advanced

Coconut oil, crude, Pac. coast, ¼c. per lb.
Copra, $2.50 per ton.
Ouricury wax, 2c. per lm.
Peanut meal, $1 per ton.
Tall oil fatty acid, 1c. to 1¼c. per lb.

Reduced

Cocoa butter, ½c. per lb.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.
Linseed meal, $1 per ton.
Soybean meal, $3 per ton.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 20, 1960
114.13	113.82	111.16	112.01

For Current Prices See Page 9

Vegetable Oils

Castor—Trading was still spotty, chiefly for actual needs. No. 1 Brazilian was offered at 17¾c. per pound, tankcars, New York, prompt delivery. Domestic oil was quiet and uenhanged.

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	1.306.000
Previous week	.....	1.920.000
Corresponding week, 1960	.....	3.490.000
Total this year	.....	31.858.000
Corresponding period, 1960	1.934.700	36.600.000

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

Coconut—Crude was slightly higher and raised to 11⅞c. per pound, tankcars, f.o.b. Pacific coast, prompt with trading at 11⅝c. for June-July shipment. At New York, tankcars unchanged at 13⅛c., f.o.b. New York.

Corn — Crude was sold at 17¼c. per pound, tankcars f.o.b. mill prompt shipment and held at ¼c. more. Refined oil was unchanged at 21.23c., tankcars, New York basis.

Cottonseed—Selling pressure brought liberal liquidation, uncovering stop loss orders in futures on the New York Produce Exchange last week. Prices turned weak, registering fractional declines for all positions.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, May 19, follow:

	Sales	High	Low	Close
		Cents per Pound		
May	164	16.59	16.05	Expired
July	1.231	16.05	15.33	15.46S
Sept.	172	15.12	14.68	14.81S
Oct.	138	14.47	14.08	14.14@14.15
Dec.	164	14.31	13.84	13.98@14.06
March	34	14.26	13.95	13.98@14.06
May	14	14.27	13.88	13.93@14.00

Total sales and switches, 1,917 contracts.

Cash oil was quiet and slightly lower. Refined salad oil was quoted at 18⅛c. per pound, tankcars, New York prompt delivery.

Crude cottonseed oil was slightly lower. Tankcars were quoted at 14⅛c. per pound, f.o.b. works, in the Valley and southeast and 14c., Waco.

Olive—Trading was reported less active for replacement, but primary markets remained unchanged and steady. Spanish oil was held at $53 per 100 kilos, drums, f.o.b. ports for prompt shipment and Tunisian ranged from $57 to $60, drums, c. and f. New York, according to quality. Demand on spot was quiet. Prices were quited at $2.30 to $2.40 per gallon, drums, exwarehouse, as to quantity.

Peanut—Crude was steady and maintained at 15¼c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was quoted at 18½., tankcars, New York basis.

Soybean — Market continued to fluctuate with soybeans, closing ¼c. lower for the week. Crude was quoted 12⅝c. per pound, tankcars, f.o.b. Decatur, May shipment. Refined salad continued to in good request against contracts. Tankcars declined to 14⅞c. per pound, New York basis.

Yugoslavia bought 28,000 tons of vegetable oils and Mexico 3,000 tons last week.

Tall—Demand was active for all grades. Tall oil fatty acids were advanced 1c. to 1¼c. per pound, in most quarters and the higher schedule was due to become general next month. Fatty acid, less 2 percent rosin acid ranged from 6c. to 9¼c. per pound, tankcars, f.o.b. works, prompt shipment depending upon seller and 2 to 6 percent acid at 5c. to 6c., same basis. Refined and distilled grades were unchanged and strong at recent advance of ¾c. to 1c. per pound.

Tung—Lack of buying interest for domestic and export account kept the market unsettled. Tankcars were unchanged and merely nominal at 25½c. per pound, New York, prompt delivery. Drums were held at 27c. to 27½c. spot, depending upon quantity.

Interest in government owned tung oil continued quiet last week, and no bids were received for 600,000 pounds offered by CCC. This was the second week buyers remained out of the market.

Miscellaneous

Cocoa Butter—Market was easier. Spot stocks ranged from 54½c. to 59½c. per pound, spot, according to quantity.

Copra — Shipments were quiet and steady. Prompt shipment was quoted at $160 per ton, c.i.f. Pacific coast with bids at $158.

Flaxseed—Crushers raised bids on cash flaxseed 3c. a bushel to $3.15, spot and to-arrive, basis Minneapolis. Higher level brought moderate increase in offerings and about 175,000 bushels traded on to-arrive basis. Seeding passed the half-way mark in Minnesota, while South Dakota planting is over two-thirds completed and North Dakota near the one-third mark. Generous rains have fallen throughout the area.

Fats and Greases

Greases — Business continued spotty, chiefly for prompt needs. Prices were unchanged. Choice white was quoted at 8½c. per pound, tankcars, delivered and bid ⅛c. less. Yellow grease ranged from 7½c. to 7⅝c., same basis according to acid content.

Lard — Market was steadier and unchanged. Cash lard was quoted at 11c. per pound, drums, Chicago.

Tallow—Trading lacked snap and limited to actual needs. Market was steady at unchanged quotations. Bleachable fancy ranged from 8c. to 8⅛c. per pound, tankcars, delivered; prime, 7¾c. to 7⅞c.; special, 7⅝c. to 7¾c.; guaranteed fancy, 8¼c. to 8⅜c. and No. 1, 7½c. to 7⅝c., same basis. Edible tallow was nominal at 9¾c. to 10c., same basis. Export business was limited. Guaranteed fancy was nominal at 8⅜c. per pound, f.o.b. steamer and 1c. more for drums, f.a.s.

Cake and Meal

Cottonseed Meal—Market was quiet. Stocks are low. Prices were steadv. Meal 41 percent ranged from $62 to 65 per

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Oils, Fats and Waxes

ton, sacked in the Mississippi Valley and $70, Alabama, Georgia Carolinas.

Linseed Meal—Weakness persisted in this market as production continued to exceed limited demand. Prices dropped $1 a ton and re-sale offerings were available at 50c. under crusher quotes. Withdrawals against old balances were at good rate. Extracted meal, 34 percent protein, bulk, in carlots, f.o.b., Minneapolis, was lower at $55 a ton for May, $56 for June and $57, July. Expeller meal, 32 percent was held at $60.50 for May-June; $61, July-August, and $62.50, September-December.

Peanut Meal—Trading was moderate. Supplies were light and firm. Old process meal, 45 percent was quoted in small lots at $69 per ton sacked and solvent, $66, Georgia, Alabama, area.

Soybean Meal—Demand for formula feed manufacturers lagged and crushers were able to offer substantial supplies for immediate shipment, despite curtailed production. Unrestricted meal was weakest, down $3, while other markets declined $1.50 to $3. Meal, 44 percent, was quoted at $70 a ton, unrestricted, bulk, Decatur, prompt delivery.

Waxes, Vegetables

Ouricury wax has finally come to life because of the scarcity of available supplies for shipment. Crude for shipment were raised at least 2c. per pound to 52c. per pound. Small stocks on spot were higher at 52c. per pound. Refined was also firmer and held at 56c. to 58c. per pound, spot, depending upon quantity and seller.

Demand for carnauba grades continued quiet, but the market remained fairly steady at unchanged prices. Candelilla was in light request and held at unchanged levels.

Victor Is Introducing A Stable Methyl Parathion

Victor Chemical Works, Chicago, a divlsion of Stauffer Chemical Company, has developed a new, stabilized form of methyl parathion. The material is being introduced on a national basis as stabilized "T-80" methyl parathion.

Because "T-80" has a full 80 percent concentration, less material need be sprayed on absorbent carriers, Stauffer says. This, in turn, is said to yield drier, more free-flowing dust bases. Such formulated dusts also contain less solvent so that weight loss through evaporation is reduced, according to the company. Moreover the higher concentration of the toxicant reportedly reduces spray time and thereby minimizes labor costs.

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Stokes Vacuum Impregnating System. Model #5648.

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Cornell Stainless Model C-D26 Versators.

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2 Stainless Steel Micronizers 30".
Abbe, Ball & Jewell Rotary Cutters; in a wide range of sizes, capacities.
Ball Mills and Pebble Mills by Abbe, Paterson, International, some Jacketed; up to 8' x 8'.
Mikro Pulverizers up to No. 4's.
Fitzpatrick Comminutators; Models D, K and C; motorized.
American Ring Roll Crusher; 50 HP.
Mikro S/S Atomizers; Nos. 6 and 5.
Raymond Imp Mills; many sizes.
Williams Hammer Mills to 60 HP.

COLLOID MILLS

Premier Stainless Model U3; 6" with 15 HP Motor.
Eppenbach QV8 with 5 HP motor.
Chemicolloid Stainless Homogenizer 15 HP; 3525 RPM.
Cherry Burrell Stainless Sanitary Homogenizer Size 1500; 25 HP.
Flowmaster Kombinators Model 200.

MIXERS ALL TYPES

Baker Perkins Jktd. 5 gal. UNE-7, Dbl. Arm Mixer with pressure cover; 30 HP.
Readco Jktd. 15 gal. Dbl. Arm Sigma Blade Mixer.
Baker-Perkins Stainless Steel Lab Mixer; Sigma Arms; 6½" x 9½" x 11½".
Baker Perkins Jktd. Mixers, 50 gal., 150 gal., 200 and 300 gal.

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CENTRIFUGES

Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.
2 Sharples Stainless Steel Model PN14 Super-D-Canters.
4311 S 1 Sharples C 27 Super-D-Hydrator in Type 316 Stainless with 40 HP motor.
5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".
2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.

REACTORS—PRESSURE VESSELS

2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.
6 Dorr-Oliver Stainless Steel Thickeners or Reaction Vessels; 550 gal. 5' x 5'.
Stainless Reactor, 2000 gal. Fully Jktd. Agitated.
Lancaster Stainless Lined Rotary Reactor or Digester; 50" x 17'4"; Jacketed; good for 300 PSI Internal.
Pfaudler Gl. Lined Reactors; all sizes from 50 to 1000 gal.
Mojonnier Stainless Vac. Pans; 3'x10' and 6' x 12'; others.

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3" x 2" Monel. 5'3" x 8' Stainless.
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Feinc S/S Rot. Vac. Filter 3' x 1'.
Oliver Cont. Rot. Vacuum Filters.
Panel Type; 8' x 8' and 8' x 10'.

FILTERS—FILTER PRESSES

4 Pressure Filters 30" x 56" Type 316 Stainless; 100 sq. ft.
Sparkler Steel Filter Model 33 S 17.
S/S Nutsche Type Filter; 6' x 2'.
Bowser Filter with Pump; 2000 GPH.

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CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
2—Bird 24" x 38" Solid Bowl Continuous 304 SS.
1—Bird 40" x 60" solid bowl continuous, 316 SS, UNUSED.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—Pfaudler 125 gal. 304 SS jacketed agitated Reactor, 150# int., 125# jacket.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
2—Pfaudler 850 and 650 gal. Steel jacketed agitated Reactors.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
2—2700 gal. 316 SS vertical agitated Tanks with coils.
1—4200 gal. 316 SS verticals Tank, 8' x 12'.
1—5500 gal. 316 SS clad pressure Tanks, 250 psi.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—10,000 gal. rubber lined Tank, 10' x 17'6".
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
4—Stainless Heat Exchangers; 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 4' dia. monel, horizontal Filter.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 3' x 1' 316 SS Rotary vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

1—Buflovak Vacuum Shelf with 17—60" x 80" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Stokes 4' x 20', 304 SS, Rotary Vacuum Dryer.
6—Louisville Rotary Steam Tube 5'x25', 6'x30', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Louisville 4-1/2' x 25' Inconel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
1—Stokes Model 38-A Tray Dryer with 16—36" x 36" SS shelves.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
2—Wyssmont Dryers, 304 SS, 6'2" and 9'6" dia.

MIXERS

1—Abbe 110 gal. 304 SS Jacketed Agitated Vacuum Dispersal Mixer.
2—Day Imperial 150 gal. jktd. double arm.
2—Baker Perkins 150 and 100 gal. jacketed double arm sigma blades.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—2' dia. Simpson Intensive Mixer, 304 SS.
1—45" dia. Lancaster Mixer, 7-1/2 HP motor.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.
1—Patterson 80 cu. ft. conical Blender, 304 SS.

MISCELLANEOUS

3—Kinney Vacuum Pumps, 1000 cfm, 10 micron, 15 HP.
1—Thropp 6" x 12" 2 Roll Mill, 7-1/2 HP motor.
3—Mikro Pulverizers, 1 SH, 1S1 and Bantam.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
3—Mikro Pulverizers, 1SH, 1S1 and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#842 Rotex Sifters 60" x 84" double deck.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.

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18—Pfaudler 1250 gal. Blue G/L Reactors, closed, Jkt. & Agit.
18—Pfaudler 11,500 Blue G/L Horiz. Tanks, 20# WP Nickel Coils.
72—Pfaudler 250 gal. Blue G/L Jkt. Kettles.
60—1350 gal. T347 SS Tanks, ASME 60# WP, Coils.
18—3650 gal. Vert. Stainless Steel Tanks.
9—13,300 gal. Vert. Stainless Steel Tanks.
20—27,500 gal. Horiz. Steel Tanks, ASME 75# WP.
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150—Worthington 2" x 1-1/2" Worthite Pumps.
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1—Buflovak 32" x 72" Twin-Drum Dryer, Chrome-Plated, Stainless Conveyors, Hoods, etc. Late Model!
5—Buflovak 42" x 120" Drum Dryers, ASME 160#.
1—American 42" x 120" dbl. Drum Dryer, ASME, stainless.
1—Buflovak 42" x 90" dbl. Drum Dryer.
1—American 36" x 84" Dbl. Drum Dryer, ASME, Vacuum.
1—Buflovak 5' x 12' Single Drum Dryer, Vacuum.
1—Buflovak 32" x 52" Dbl. Drum Dryer, ASME 100# WP.
1—Buflovak 110 sq. ft. Vacuum Shelf Dryer.
5—Stokes 195 sq. ft. Vacuum Shelf Dryers, #138J-16.
2—Davenport 8' x 60' Rotary Dryers, 7/16" Welded, Burners, Fans, etc.
1—Louisville 4'6" x 25' Rot. Steam-Tube Dryer, Welded.
1—Hardinge 4' x 30' Rot. Steam-Tube Dryer.
1—Bartlett 3' x 15' Rotary Dryer, Everdur Shell.
1—Nerco-Niro Portable Stainless Spray Dryer.

FILTERS—CENTRIFUGALS

3—Sweetland #12 Pressure-Leaf Filters, (72) St. St. Leaves.
5—Shriver 48" Cast Iron Filter Presses, 1250 sq. ft.
6—Valley 36" Aluminum Filter Presses, 1000 sq. ft.
1—Niagara #510-28 T316SS Pressure Filter.
1—Oliver 5'3" x 8' Precoat Rot. Vacuum Filter—Unused.
2—Oliver 5'3" Precoat T316 SS Rot. Vacuum Filters.
10—Davenport Dewatering Presses; #1A, 2A, 3A.
25—Sharples #AS-16V Super Centrifugals, Inconel, Sludge Disch.
3—Sharples #C-20, C-27 Super-D-Hydrators, T316SS.
2—Sharples #16-P cent., T304SS, Pressuretite.
3—Bird 24" x 24", Monel Slotted-Bowl.
1—Bird 24" x 38", Steel, Cylindrical Bowl.
2—Bird 24" x 38", T304SS Conical Bowl.
1—Tolhurst 48" Susp. Cent., T304SS.
5—A.T.&M. 40" Susp. Cent., T304SS Solid, 40/5 HP.
2—A.T.&M. 32" Susp. Cent., T304SS Solid, 30 HP.
1—Fletcher 30" Junior, T304SS Extractor, Perf.
1—Tolhurst 26" Susp. Cent., Steel, Perf., 5—2 1/2 HP.
1—A.T.&M. 12" Susp. Cent., T304SS, Perf.

MIXERS—MILLS

50—Baker Perkins #17, 200 gal. Sigma Jktd. Mixers.
1—Baker Perkins #16-UUEM, 150 gal. Dispersion Mixer, 150 HP XP Motor, 125# Jacketed, Vaulted Cover.
1—Baker Perkins #15-UUMM, 100 gal. Dispersion Mixer, 100 HP, ASME Jacket, Cored Blades, Compression Cover, Motorized Tilt.
1—Baker Perkins #15, 100 gal. Disp. Mixer, T347SS, Jkt.
1—J. H. Day #6 Cinc., 100 gal., Sigma Blades, Stainless.
2—J. H. Day #5 Cinc., 75 gal., Sigma Blades.
1—Gemco 60 cu. ft. T304SS Conical Blender.
13—Abbe 6' x 8' Pebble Mills, Stone Lined, 30 HP.
1—#2TH Mikro Pulverizer, 10 HP.
2—Hardinge 7' x 36" Conical Pebble Mills.
1—Allis-Chalmers 5' x 5' Contin. Ball Mill, 75 HP.
1—Raymond 50", 5-Roller Hi-Side Mill.

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1—2000 gal. 8' x 5' Cone Bottom Hinged Dished Top. 3/8"
1—1300 gal., 6' x 6', Dished Bottom, Hinged Dished Top. 5/16"
2—1000 gal., 4'6" x 8'6", Flat Heads. 3/16".
1—1000 gal., 4'6" x 8'6", Dished Heads, 3/16".
4—1000 gal., 6' x 5', Flat Heads, 14 ga.
1—900 gal., 6' x 4', Dished Bottom, Open Top.
1—750 gal. 5' x 5', Dished Heads, 3/16".
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3—Sweetland #12 Filters, 72 lvs on 2" centers. Hydr closing. Exc cond.
1—Oliver 3'x2' SS rotary vacuum Filter. Continuous. Comp equipped.
3—Oliver 8'x14' cont. vac. rotary Filter. Closed drums. With drive.
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2—AUTOCLAVES S.S., 50 gal. 2000 lb., 3½ gal., 2000 lb.
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COLLOID MILL—Premier UB5 S.S. 5 H.P.
CENTRIFUGE—ATM Susp. 48" 316 S.S., 50 HP.
ROLLER MILLS—Ross 14" x 32" Hi Speed Ross 4½" x 10".
CENTRIFUGE—Tolhurst 20", 40" Rubber Lined.
PEBBLE MILL—Abbe—50 gal.
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MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000. Mikro Pulverizer #4, 2S1, 2TH, ISH. Hammer Mills & Pulverizers 3 to 50 HP. Williams #3 & #2XX Hammer Mills. Taylor-Stiles 7½ HP Cutter. Rotary Cutters 1 HP & up. Sprt-Wald Stainless Spike Crusher. Pebble, Jar & Ball Mills, Lab to 6' x 8'. 3 Roll, 9" x 24", 12" x 30", 16" x 40". Lehmann 4 Roll W. C. 12" x 36" Steel.
MIXERS—Baker Perkins 100 gal. Jack. B. P. 15 HP—Masticator Mixer. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15, 40, 80 gal. Day Jumbo 700 gal. horiz. Mixer. Sprout-Waldron 10,000# horiz. Spiral Mixer. Blystone 3000# horiz. spiral Mixer. Day 1000# horiz. Dry ribbon Mixer. Dry Spiral Mixers 50 to 10,000#. Lancaster 6' dia. 25 HP & #1, 3 HP.
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78"x18' Bubblecap 14 tray, 50 PSI.
72"x30' Bubblecap 21 tray.
54"x30' Bubblecap 26 tray, 100 PSI.
48"x41' Bubblecap 40 tray, 100 PSI.
36"x20' Packed, 100 PSI.
30"x22' Packed, 75 PSI.
14"x18' Packed, 10 PSI.
12"x18' Packed, 100 PSI.

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4500 gal. 6'x25' dish/cone heads, 25 PSI.
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Paraxylene Facility

—Continued from page 4

separation step of the mixed xylene products, Suntide says.

The unit becomes the tenth petrochemical project either in operation or under construction at Sunray's three refineries at Tulsa, Corpus Christi and Duncan, Okla. Six of these units have been completed or started within the last two years, the company reports

Currently under construction for Suntide is a 60-million-pound-a-year styrene unit and a 30 million-pound ethylbenzene unit. Under construction at the Tulsa plant is a hydrodealkylation facility slated to turn out 800 barrels of benzene a day.

Polyolefin Marketers in Business Race

—Continued from page 3

biotics sales of $325 million were the chief contributor.

Speaking of the hazards of plastics manufacture, Mr. Knowles emphasizes that current polyolefins producers cope daily with such serious business uncertainties as:

1. Over-capacity

2. Rapid technical obsolescence with related expensive research and development costs.

3. Price adjustments without related savings in production or handling costs.

4. Potential decrease in foreign markets.

Dealing with the first problem, Mr. Knowles cites polyethylene as an example. During the period 1955-1960 high-density PE capacity went from nothing to 350 million pounds, and low-density potential to 1.4 billion pounds annually. Producers grew in number from seven to thirteen.

In the second case, the buyers' market created by over-capacity creates problems of obsolescence. To satisfy a customer a producer might come up with a tailor-made product.

Result: A standard product may be obsoleted even before it is amortized; manufacturing procedure might have to be modified; product development funds have been spent months before anticipated.

Regarding price adjustments, the Carbide sales manager notes that polyethylene now sells for 27½ cents a pound—one-third the price in 1955.

For Plastics Pricing: Caution

He urges caution in pricing policies, pointing out that selective price reductions in order to gain competitive advantage in certain markets may lead to a general reduction.

Mr. Knowles warns that polypropylene makers had better watch out, or they'll find themselves in the same pickle as PE producers.

"In 1958 there was one producer. Last year there were five, and to date, four more companies have announced their intention to enter this field.

"Presently, potential polypropylene capacity is far in excess of sales—close to 150 percent. While we must remember that polypropylene is just gaining acceptance, there is little to indicate the over-capacity gap will close during the next few years.

"We obviously need a great deal of imaginative effort applied to the area of market development if a repeat of the current polyethylene situation is to be avoided."

John H. Howard of American Cyanamid Company, reviewing and forecasting fertilizer markets, told CMRA that fertilizer prices in 1961 will probably remain static.

Two factors are involved: Farm income has improved, making for a bullish situation, and supplies might be tight.

The current outlook on fibers was discussed by Dr. L. Frank Salisbury, of the textile fibers department of E. I. duPont de Nemours & Co.

Is there any money to be made in synthetic fibers? he asks. He reported that shipments of non-cellulosic synthetics have been about 70 percent of capacity during the last three years.

No Addition Needed til 1965

Further, he reckons that capacity projected for 1961-62 will be sufficient at the 70-percent level to provide an average of 750 million pounds a year for the next five years without any additions to capacity in 1963-65.

It will be surprising if no additions in capacity occur between 1963-65, he concludes. Therefore, this suggests the possibility of operation below recent experience of 70 percent of capacity "which means downward pressure on prices.

Fred J. Stock, corporate vice-president of Olin Mathieson Chemical Corporation, told the meeting that drug sales have grown from $350 million in 1939 to $3 billion in 1960.

He offered a breakdown by category of top-volume pharmaceuticals' 1960 sales through all outlets:

Antibiotics, $325 million vitamins, $225 million internal analgesics, $225 million cough and cold preparations, $192 million; cardiovascular and diuretics, $153 million; ataractics-tranquilizers, $144 million; hormones, steroids, etc., $137 million.

Also, laxatives, $115 million; anti-obesity preparations, $110 million; biologicals (including veterinary), $90 million; and anti-diabetic products, $55 million for a total of $1.771 billion.

S. Leonard Davidson of National Lead Company pointed out that the coatings industry looks to the chemical industry to produce materials which paint chemists can use to formulate new and better products.

Trade Name Chemicals

—Continued from page 51

questrants are also being marketed now.

"Cyquest 30AG" is the trisodiumhydroxy ethyl derivative and "Cyquest DEG" is sodium dihydroxyethyl glycinate. The latter products effectively sequester iron at high pH where the ordinary chelating agent is not effective.

Trade Name Briefs

COATINGS: Rohm & Haas Company announces availability of a new acrylic-modified vinylidene-chloride emulsion for paper coating. The product, "Rhoplex R-9," is expected to find use in food packaging and has therefore, been developed with Food & Drug Administration requirements in mind, the company says.

STABILIZERS: Advance Solvents and Chemical division of Carlisle Chemical Works is marketing a new liquid barium-cadmium-zinc heat and light stabilizer package which also contains auxiliary stabilizers. Tradenamed "Advastab BC-110," the product is reported especially suitable for plastisol and organisol applications, generally recommended at levels of 1 to 3 parts per hundred of resin with 5 to 10 parts of monomeric epoxy plasticizer.

Methyl Chloride

—Continued from page 3

deal of interest these days because it is a basic raw material for the gasoline additives, tetraethyl lead and tetramethyl lead.

Good sales prospects for the Ansul-Continental combine are the latest companies to express interest in TEL and TML: Nalco Chemical Company, Houston Chemical Company and Stepan Chemcial Company.

Already well entrenched in the gasoline additives business are old timers E. I. duPont de Nemours & Co., and Ethyl Corporation.

Continental Oil, a Houston, Tex., company, runs a large refinery and a natural gasoline unit at Lake Charles. It also has under construction there a $10 million "Alfol" plant which will be the world's first installation to produce industrial alcohols from petroleum rather than from natural oils and fats.

As part owner of other plants at Lake Charles, Conoco also produces lubricating oil and wax, carbon black, butadiene rubber, anhydrous ammonia, ethylene and antifreeze products.

UK Drug Makers Snubbed

—Continued from page 3

tion, declined immediate comment—as did the Pharmaceutical Manufacturers Association.

The UK drug organization—the Association of the British Pharmaceutical Industry—was not so reticent, however. Viewing the government decision with "grave misgiving," an association spokesman said:

"If this has the effect of so reducing prices as to make prohibitive the maintenance of research and development expenditure, we believe that it will be impossible for the industry to maintain its international competitive position.

"We consider, therefore, that it is essential for satisfactory administrative procedures to be agreed between the health departments and the industry to insure that the originator of a new product receives an adequate reward for the Crown's use of his invention."

Oral Polio Vaccine

—Continued from page 3

reserve by the British Ministry of Health for possible use in Great Britain.

Meanwhile, Chas. Pfizer & Co. says it has not heard whether its application for a British license has been cleared. The company's British subsidiary is producing large test quantities of the vaccine at Sandwich, England.

US drug producers say they can't get the vaccine on the market before October or November—provided they get licenses the US Public Health Service.

Wyeth Laboratories, a division of American Home Products Corporation and Lederle Laboratories a division of American Cyanamid Company, are gearing up to produce the Sabin vaccine in this country.

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SAN FRANCISCO (SUtter 1-5568) — Robert W. Walker Company, 57 Post Street, San Francisco

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Vinyl acetate monomer, zone 1. 55-gal. dms., c.l., divd lb. .1810 —
55-gal dms. l.c.l., divd lb. .1960 —
tanks, divd. lb. .1560 —
tanktrucks less than 4,000 gal., divd lb. .1610 —

Vinyl n-butyl ether, tech. dms., l.c.l., works lb. .50 —

Vinyl chloride monomer tanks, works, min frt equald E. lb. .0890 —

Vinyl ether, USP, anesthesia, bots., 50cc. hospitals bot 1.12 —
bots., 75cc. hospitals bot 1.56 —

Vinyl ethyl ether tech. dms., c.l., works lb. .30¼ —
dms., l.c.l., works lb. .31 —
tanks, works lb. 28¼ —

Vinyl propionate monomer, dms., c.l., divd lb .49 —
dms., l.c.l. same basis lb .50 . —
tanks, same basis lb. .47 . —

Vinyl trichloride (see Trichloroethane)

2-Vinylpyridine, 10 dms to tanks, works lb 1.20 . —
1 to 9 dms., works lb 1.35 . —
tanks, works lb 1.15 . —

Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 lb. .16½ —
dms., l.c.l. same basis lb .18½ —
tanks, same basis lb. .14 . —

Zone 2 prices are 1c. per lb. higher.

Zone 1 is East of Rockies. Zone 2 is West of Rockies.

Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units 02½ —

Virginia type red, bbls, works lb 1.40 —

Vitiamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼ —

Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo 65.00 . —
325,000 units per gram, same basis kilo 43.88 . —
250,000 units per gram, same basis kilo 33.75 —

Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher

Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units 09½ —

Vitamin A palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units 09¼ —

Vitamin B_1 (see Thiamine hydrochloride).

Vitamin B_2 (see Riboflavin and Yeast)

Vitamin B_{12}, cryst., USP (cyanocobalamin) 1-50 grams vials, tins gram 45.00 —

Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 . —

Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots, 1-5 kilo dms gram. .57 . —

Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram 52.00 . —

0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo 52.00 . —

0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm 52.00 . —

USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram 52.00 . —

Vitamin B_{12}, 0.1% cobalamin concentrate NF adsorbed on resin 500-gram bots, 1-5 kilo dms, frt. alld gram. .57 . —

Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo, dms., frt. alld gram. .57 . —

Vitamin C (see Ascorbic acid).

Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol)

Vitamin D dry, 850,000 units per gram, kilo lots kilo 42.50 —
850,000 units per gram less than kilo lots kilo 45.00 —

Vitamin E (see a-Tocopherol and Wheat germ oil).

Vitamin H (see Biotin).

Vitamin K, active (see Menadione)

Vitamin K_1, 25-gram lots ..... gram. 4.50 . —

Violet methyl toner (see Methyl violet toner)

VM&P naphtha (see Naphtha VM&P petroleum).

W

Wahoo root bark, bls lb 2.00 2.25

Warfarin 0.5% dms. 50-lb. lots, dlvd lb 1.95 —
dms. 25-49-lb lots, New York or Chicago lb 2.05 —
dms. 5-24-lb lots, New York or Chicago lb 2.15 —

Watchung-type reds, bbls lb 1.95 —

WAXES

Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms. gal. 12.25 —

White lead (see Lead, white).

White mineral oil (see Mineral oil, white).

White pine bark, rossed, bls lb 21 .22

White precipitate, USP, powd., dms., 100 lbs. f.o.b. works lb 5.50 —

Whiting (see Calcium carbonate)

Wild cherry bark, thin, nat., bls lb. .30 —

Wintergreen oil USP nat north ern, ens lb 6.35 17.50
USP nat southern ens lb 3.75 7.00

Wintergreen oil, syn (see Methyl salicylate).

Witch hazel bark, bls lb .30 .35

Witch hazel leaves, bls lb .75 . .80

Wollastonite fine paint grade, bgs., c.l., works ton 41.00 . —
bgs., l.c.l., ex whse ton 51.00 . —
medium paint grade, bgs., c.l., works ton 29.00 . —
bgs., l.c.l., ex whse. ton 39.00 . —

Wood alcohol (see Methanol).

Wood oil (see Tung oil)

Woolfat crude (see Degras).

Woolfat USP (see Lanolin).

Wormseed Levant bgs lb 2.50 . —

Wormseed oil (see Chenopodium oil NF)

Wormwood oil, ens lb. 4.75 . —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal 29 —
Birmingham dist. gal 29 —
Chicago dist. gal 28½ —
Cleveland dist. gal 29 —
Geneva, Utah gal 29 —
Johnstown, Pa. gal 29 —
Lackawanna, N.Y. gal. 29½ —
Lone Star, Tex gal 27 —
Lorain, Ohio gal. 29 . —
Middletown, Ohio gal 30 —
Minnequa, Colo gal 29 —
Philadelphia dist. gal 29 . —
Pittsburgh dist. gal 29 . —
Sparrows Point, Md gal 29 —
Terre Haute, Ind gal 29 —
Youngstown, Ohio gal 29 . —

Petroleum, indust., tanks, f.o.b. works:
Bayonne, N. J gal 29 . —
Baytown, Tex. gal. 27 . —
Charleston, S. C. gal 29 . —
Chicago, Ill gal 28½ —
Detroit, Mich., dlvd gal 27½ .29
Houston, Tex. gal 27 —
Philadelphia, Pa. gal 29 —
Providence, R. I. gal 30 —
Sewell's Point, Va. gal. 28 . —
Wood River, Ill gal 28½ —

m-Xylene, 95% dms., c.l., f.o.b., Richmond, Calif lb. .21 —
dms. l.c.l. f.o.b., Richmond, Calif lb .22 . —
tanks, frt. alld. lb. .19 . —

o-Xylene, dms., c.l., works lb 08 —
dms., l.c.l., works lb 09 —
tanks, works lb 06 .06½

p-Xylene, dms., c.l., works lb. 20 —
dms., l.c.l., works lb. .21 —
tanks, frt alld lb. .1645 —

Xylenol cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 . —
56°-58°C., m.p. dms., l.c.l., works, frt. equald lb .33 . —
60°-62°C., m.p., dms., l.c.l., same basis lb. .40 . —

Xylenol fraction b.r 7°-9° C. dry above 227° C. dms., c.l., same basis gal 1.25 —
dms., l.c.l. same basis gal 1.30 —
tanks same basis gal 1.05 —

b.r 7°-9° C., dry at or below 227° C. dms c.l. same basis, gal. 1.35 . —

Xylenol fraction b.r 7°-9° C. dry at or below 227° C., dms., l.c.l. same basis gal. 1.40 . —

2,4-Xylidine, tech. dms.' frt alld lb 1.15 . —

2,5-Xylidine, tech., dms., frt. alld. lb 1.20 . —

Xylidines mixed o-m-p dms., c.l., or t.l., works lb .39 —
dms., l.c.l. same basis lb 40 —
tanks, same basis lb. .38 —

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene

Y

Yara yara oil, ens. lb 2.15 3.05

Yeast, brewers, debittered USP XV Saccharomyces dlvd lb. .27 . —
primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms lo. .47 . —
USP XV, 270 mcg B_1 per gram 100-lb dms lb. 52 —

Yeast, brewers, primary USP XV, 300 mcg B_1 per gram, 100-lb dms lb. 56 . —

Yeast, brewers, USP XV, 900 mcg. B_1 per gram, 100-lb. dms. lb. .60 . —

Torula USP dlvd lb 18 —

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls lb 40 45

Ylang Ylang oil, Bourbon, bots lb. 7.00 22.00
extra, bots lb. 24.00 33.00

Yohimbine hydrochloride, bots, tins oz. 3.75 4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works lb. .37 . —
50-lb. bgs., smaller lots, f.o.b. works lb. .41 . .44

Zinc acetate, NF VIII, dms lb .33 —
Tech., dms., l.t.l., works lb. .2950 —

Zinc borate bgs. 1,000 lbs or more, works lb. .25 . —
bgs. less than 1,000 lbs., same basis lb .27 . —

Zinc chloride NF gran. dms lb 42 . —
NF precip., powd., dms lb. 26 . —

Tech. soln. 50%, dms., c.l., works 100 lbs 5.80 . —
dms., l.c.l., works 100 lbs 6.40 . —
tanks, works 100 lbs 5.15 . —
fused dms c.l. works 100 lbs. 10.70 . —
dms. l.c.l. works 100 lbs. 11.20 . —

Zinc Chloride, tech. gran., fib. dms., c.l., works 100 lbs. 11.45 . —
fib dms. l.c.l. works 100 lbs. 11.95 . —

Zinc chromate bbls. divd lb .29 —
Basic bbls. divd lb .34 —

Zinc cyanide dms. 1,000-lb. lots or more, works lb. .55 . —
dms. smaller lots, works lb .57 . —

Zinc dust coml bbls. c.l. works. lb. .16 . —
Pigment, bbls., c.l., works lb. 15½ —
bbls., l.c.l., works lb. 17¼ —

Zinc fluoride, bbls works lb. .49 .56

Zinc hydrosulfite dms. c.l., frt. alld lb. 21½ —
dms. l.c.l. frt alld lb 23½ —

Zinc metal, prime western, slabs, E. St. Louis lb. .11½ —
Prime western slabs, New York lb. .12 . —

Zinc naphthenate liq 8% Zn., dms., frt. alld lb. .27 . —
10% Zn. dms frt. alld lb. .33 . —

Zinc nitrate, tech., flake, 100-lb. fib dms., l.c.l. . . lb. .16½ —
300-lb fib. dms. l.c.l . . . lb. .14½ —
300-lb. fib. dms., c.l. . . . lb. .14 —

Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b works lb. .12½ —
bgs., l.c.l., 10 tons or more, same basis lb. .13 . —
bgs., l.c.l., smaller lots, same basis lb. .13½ —

Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b works lb. .14 . —
bgs., l.c.l., 10 tons or more, same basis lb. .14½ —

pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis. .14½ —

Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b works lb. .14½ —
bgs. l.c.l. 10 tons or more, same basis lb. .15 . —

Zinc oxide, French process green seal bgs. l.c.l. smaller lots, same basis lb. .14½ —
red seal bgs. c.l. same basis lb. .14 . —

Zinc oxide, French process, white seal bgs., l.c.l., 10 tons or more, same basis lb. .15 . —
bgs. l.c.l. smaller lots same basis lb. .15½ —

Zinc oxide white seal, bgs., c.l., same basis lb. .14¾ —
bgs. l.c.l. 10 tons or more, same basis lb. .15¼ —
bgs. l.c.l. smaller lots, same basis lb. .15¾ —

Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld. lb. .15¾ —
50 lb.-dms., l.c.l., 10 tons or more, same basis lb. .16¼ —
50 lb.-dms., l.c.l., smaller lots, same basis lb. .16¾ —

Zinc phenolsulfonate NF gran. dms lb 45 .49
NF powd. dms lb 48 .49

Zinc resinate precip 7.2-7.6% Zn dms, frt. alld lb. .45 . —

Zinc silicofluoride, dms works lb .13½ .14

Zinc stearate USP ctns., c.l. lb. 41 . —
lb 41 —
ctns l.c.l. lb 42 .49

Zinc sulfate powd., monohydrate, 36% Zn bgs. c.l. dlvd E. 100 lbs. 8.00 . —
bgs., l.c.l., dlvd. E 100 lbs. 9.00 . —

Zinc sulfate in bbls 40c higher

Zinc sulfide pure bgs c.l. dlvd lb 2530 —

Zinc undecylenate 75-lb fib. dms., f.o.b. works lb 2.04 . —

Zinc yellow (see Zinc chromate)

Zinc-ammonium chloride, bgs., c.l., works 100 lbs 10.25 . —
bbls. c.l., works 200 lbs. 10.85 . —
bbls. l.c.l. works 100 lbs. 11.35 . —

Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld lb 26 . —
Normal, 250-lb dms., frt. alld lb .55 . —

Zircon (G) gran. bgs. c.l. works lb 03½ —

Zircon (G) gran. bgs., 5 tons to c.l., works lb. .03½ —
bgs., 1 ton to 9,999-lb lots, works lb 04 —
bgs., smaller lots, works lb. 06½ —

Zircon (G) milled bgs. c.l. works, lb 04½ —
bgs. 5 tons to c.l., works lb 04¾ —
bgs. 1 ton to 9,999-lb. lots, works lb. 04¾ —
bgs. 500-1,999-lb lots, works lb. .07½ —

Zircon (G) in barrels 1c. higher.

Zirconium acetate soln., 13% ZrO_2, dms. c.l. 30,000 lbs. min., works lb. .23 . —

Zirconium hydride powd. electronic grade, dms. works lb. 14.00 15.00

Zirconium oxide, CP, white, grd., bbls or bgs. works lb 1.50 —

Electric-fused lump, bgs. 500 to 1,999-lb lots, works lb. 48¼ —
bgs. smaller lots, works lb .51 —

milled bgs. c.l., works lb. .62 . —
bgs. 5-ton lots, works lb 62½ —
bgs. 1-ton to 9,999-lb lots, works lb 63½ —
bgs. 500 to 1,999-lb lots, works lb 64 —
bgs. smaller lots, works lb .66 —

Glass polishing grade, 94-97% ZrO_2, bgs. works lb. .55 .60

Opacifier grade 85-90% ZrO_2, bgs., lb. .37 . .50

Stabilized oxide 91% ZrO_2, milled, bgs lb. .83 .85

Zirconium oxychloride, cryst. ctns., 5-ton lots works lb .37½ —

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